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ABSTRACT

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OF A

Course of Ten Lectures

ON

Municipal Administration

IN

MONTREAL,

Delivered in connection with the Educational Work

OF THE

YOUNG MEN'S CHRISTIAN ASSOCIATION

of Montreal,

1895-6

BY

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INTRODUCTORY NOTE.

The following pages contain summaries of certain lectures delivered by well known Montreal gentlemen before the members and friends of the Young Men's Christian Association of this city during the winter of 1895-6. It is only due to the lecturers to state that their remarks have been very much condensed and abbreviated. This course was presented, not with a view of criticizing the local administration, but for the purpose of acquainting our thoughtful young men with the actual facts regarding the way in which the government of the city in which they live, is carried on. There is also in connection with the Association, a Mock City Council, for the purpose of enabling our young men to better equip themselves for public speaking. The rules and regulations of this body will be found in an appendix of this pamphlet.

The whole is respectfully submitted on behalf of the Educational Committee.

D. A. BUDGE,
Secretary Y.M.C.A.

MONTREAL,
March 15th, 1896.

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INTRODUCTORY LECTURE.—OCTOBER 4TH, 1895.

WHY WE SHOULD STUDY THE MUNICIPAL SYSTEM OF OUR OWN CITY.

BY HERBERT B. AMES, B.A.

We are met together to-night to ask, and if possible, find a satisfactory answer to the question:—"Why should we trouble ourselves to examine into our local municipal system and its administration?" In these days of multitudinous claims upon our time and attention, what considerations have induced the Educational Department of the Montreal Association to set apart so many evenings during the coming winter for the study of a definite course in civic government? As Chairman of the Educational Work, the duty of replying to these inquiries naturally devolves upon me, and for greater convenience I shall divide my task into two portions, treating first of the importance of studying civic administration in any city, and secondly of the peculiar necessity for work of this kind in Montreal.

Taking up, then, the first of these lines of thought, let me ask:—"What are the reasons why the science of municipal government should be studied by the more thoughtful portion in any and every community?" To this inquiry my condensed answer will be:—Because this science is—in this country, at least—but imperfectly understood, and failure in understanding it affects most intimately the pocket, the health and the morals, not only of the municipality as a whole, but also of every individual within its boundaries.

This is a science difficult to master, chiefly because it deals with constantly changing conditions. Our municipal system was originally intended for comparatively small and partially rural communities. During this century of industrial development, there have been great changes caused by the centering of population in the cities. A hundred years ago in the United States, but three per cent. of the population lived in cities; to-day, not only does one-third of all the American people reside in the large municipalities, but nearly ten per cent. of the total population is to be found

A Difficult and
Imperfectly
Understood
Science.

within the limits of the four largest cities. The same tendency is equally apparent throughout Europe and in our own country. When the last Canadian census was given to the public, it was noticeable that the rural districts had advanced but slowly in population, whilst the manufacturing centres, such as Montreal and Toronto, had rapidly increased, the former of these two cities showing an increase in population, during ten years, of 40 percent the latter of 88 per cent. With this rapid growth in numbers, our knowledge of the science of providing for increased population has not kept pace. It is very much like a suit of clothes which the lad, who is expected to wear them, has outgrown. To rightly understand, then, a modern municipal system, and to adapt it to constantly changing conditions, requires a high order of intelligence and a wide knowledge of facts; does it not follow, then, that upon you, as a portion of the community above average intelligence, this study, because of its very difficulties, lays rightful claim to faithful and earnest attention?

What now does success or failure on the part of a community to observe the old Greek injunction "know thyself," and to appreciate the importance of good civic administration mean for that municipality and the dwellers therein?

The Financial
Aspect of the
Case.

First, as to the financial aspect of the case. We are all inclined, I think, to underestimate the magnitude of a civic administration, considered as a business enterprise. The sums of money collected and expended by different municipal corporations are such as should raise these bodies to a height of importance rarely accorded them. The annual receipts of the municipality of Chicago are nearly equal to those of the Dominion Government. Our Montreal aldermen have the annual disposition of funds equal to two-thirds the amount collected for the administration of the government of the entire Province. In proportion to the magnitude of the enterprise, so is the power for good or evil which a municipal administration exerts upon a city. As evidence, mark the experience of Paris and Washington. It is well known that both these cities are unusually agreeable and attractive to dwell in, because of the comforts supplied and the effective service furnished by the municipal authorities. The immediate result is that many wealthy families from all parts of France and the United States select these respective capitals for winter abode, thus bringing increased prosperity to the business portion of each city, and enhancing the value of all real estate therein. A desirable class of citizens will certainly flock to a well-governed and well-kept city, while, on the other hand, all who can do so, will leave a city when local conditions become intolerable.

Consider the matter for a moment from the standpoint of the individual citizen. If he is to carry on business, if he is to rent or purchase a home, if he is to provide the necessities of life, the administration of the government of his city will affect him at every turn. If he be ill-governed, it will constantly grow more difficult to carry on a profitable business, it will become more expensive to rent or purchase a home, and the cost of every article needed in daily life will, in consequence, be increased. How necessary, therefore, is it that the young men of this rising generation, on to whose shoulders—be it remembered—must soon be transferred the load of taxation; who will be required to make good, out of their own earnings, any blunder or extravagance committed by the civic administration of the present day—how necessary, I say, is it that these young men should understand the system of municipal finance that obtains in their own city, should be able to criticize to some purpose when sound business laws are broken, and should have a real influence in determining what shall be the nature and the extent of the burden which they will soon be required to assume.

The second evil attendant upon poorly administered municipal government, is the danger that lies therein to public health. It is a recognized law that "the nearer people live to each other, the shorter their lives are." For perfectly healthful conditions, each man must have the exclusive use of a certain amount of air, earth and water. These gifts of nature he defiles in the using. If his share be sufficiently ample to permit of natural renovation, no serious danger is thereby incurred. When, however, circumstances compel a number of persons to dwell upon an area smaller than that which can be kept in a sanitary condition, through natural recuperative processes, the necessity for artificial reinforcement becomes imperative; therefore, in order that a large number of people may live within a small space in any city, health regulations require to be made and rigidly enforced by strong and impartial authority. If these laws are wisely framed and properly executed, the amount of sickness and the rate of death can be greatly reduced. Birmingham and Glasgow, wherein a large population must perforce be densely packed together, are examples of what wise sanitary measures, rigorously enforced, may accomplish. The annual mortality in Birmingham, which less than fifty years ago was 30 to the 1,000, is to-day but 20 to the 1,000. Twenty years ago the death rate of Glasgow was 30, to-day it is under 23½ to the 1,000. This seems a slight difference, but it means an annual saving of 4,000 lives in Glasgow alone. Now, the exercise of precautions against disease and the maintenance of conditions that will promote healthful development, rest mainly in the hands of the municipal

Municipal Mal-
administration
Means Danger
to Public
Health.

authorities. Defective municipal administration, therefore, means a high death rate, exposure to contagious diseases, and the constant bringing to maturity of a type of manhood and womanhood of which no city can be proud.

It Means Loss
of Patriotism.

Although the loss in money to a community through municipal mismanagement is bad, although deterioration in health is worse, worst of all is loss of character. It was through centuries of struggle that the privileges of self-government, so freely enjoyed by us to-day, were won. Time was when a man prized his franchise as he prized his life. When a municipality becomes so debased, by failure in the art of self-government, that men come to question whether popular government is a failure, the shock to their faith in free institutions which must inevitably result, cannot but be attended with incalculable injury to the ideals and spirit of the rising generation. If councillors, because of their incapacity, are the laughing stock of the town; if they are bribable; if valuable franchises are thrown away, and important contracts given without regard to values; if the public service is looked upon merely as an asylum for an alderman's poor relations and broken-down friends; if it is not surprising that the dignity of public office and the title such as Mayor, Alderman, or head of a civic department, once regarded as an honor, becomes a reproach. If the young men, who, in business or professional life, are struggling to make their way to the top, constantly behold a class of men—in whose honesty and capacity the public appears to have not the slightest confidence—growing daily more wealthy and powerful by the misuse of the very opportunities given to enable them to render public service, will not these young men be strongly tempted to imagine that honesty is not the best policy, and that the main requisite for advancement in that city is not a clean past record? Nor is this all. Where civic politics become diseased, national patriotism does not long remain unaffected. As soon expect pure water from a dirt-befouled spring, as pure national politics from a community whose local politics are degraded. He who loves his country, therefore, must love his city also, and labor primarily for her political purification. We have already noted how our cities are growing out of proportion with the country districts; how they are coming more and more to influence national life; how they set the pace for our whole political system. Each year this will become more true. If, then, there is to be any purity in politics, national or provincial, there must be righteousness in civic administration.

Special Need
for this Study
in Montreal.

I will but briefly refer to the special reasons why the study of municipal administration is particularly needed in our own city at this time. During the past twenty years, the mania for borrowing

money has affected Montreal as it has many another city. Our tax rate is not as yet abnormally high, but the serious side of the case lies in the fact that our annual income, after deducting interest on debt, is not sufficient to provide for the current expenses. An advance in the tax rates is a necessity in the no very distant future. So long, however, as the evil day can be postponed, the older citizens will not disturb themselves; all the greater reason why our young men should acquaint themselves with the exact facts of the case and bring their utmost influence to bear in favor of retrenchment and economy. Again, Montreal is a densely populated city. Her 250,000 people are contained within an area of 6,083 acres; this is an average, over the entire city, of 41 to the acre. Old Glasgow averages 84, New Glasgow, 53; London, 51; Birmingham, 44; Manchester, 42. Montreal is as densely populated as Manchester. Deducting Hochelaga and St. Denis Wards, the average over the remainder of the city is 57 to the acre. Compared with other cities, Montreal would be classed among the more densely populated. Only with proper sanitary laws and vigilant authorities, can our people thus live together in health. The death rate of Quebec is above that of any other province in the Dominion, yet that of Montreal is 30 per cent. over the average throughout this province. If we could bring our civic death rate down to the dominion average, 2,500 lives would be saved in Montreal annually. Do not these facts constitute an additional reason why the science of municipal administration is in Montreal specially deserving of study?

Perhaps the most prominent figure on the horizon of English politics to-day, is Mr. Joseph Chamberlain, M.P. for Birmingham, the present Colonial Secretary. Mr. Chamberlain commenced life as a plain business man—a manufacturer of screws—and the foot of the ladder up which he climbed to his present political eminence, rests upon the fact that he learned, first, how a city ought to be administered, and then carried the same business principles into a higher field. To Mr. Chamberlain we are indebted for the best expression of the ideal, which to-day obtains throughout the United Kingdom regarding municipal government. "The leading idea," he says, "of the English system may be said to be that of a joint stock or co-operative enterprise, in which every citizen is a shareholder, and of which the advantages are receivable in the improved health, and the increase in the comfort and happiness of the community. The members of the Council are the directors of this great business enterprise, and their fees consist in the confidence, the consideration, and the gratitude of those among whom they live." It is the attainment of such an ideal as this

The British
Ideal of
Municipal
Government.

for which we are to strive. It is because this principle is recognized and followed out to its logical conclusion that the humblest workingman in nearly every British municipality enjoys benefits unknown to us.

How It is being
Carried Out.

The two desiderata before the eyes of the ideal city government are, first, the obtaining of sources of revenue other than taxation, and, secondly, the instituting of some new privilege for the use of the people. Many cities throughout great Britain control and operate, with profit, their municipal monopolies, such as street railways, gas, water, &c. From these, when properly administered, a large revenue accrues. English cities of about the same size as our own, as for example Bradford, Hull and Nottingham, obtain 50 per cent. of their annual receipts from the successful management of municipal assets. In Glasgow, this proportion reaches 70 per cent. By just this proportion is the tax rate reduced. Manifold, also, are the measures by which the enlightened British municipalities are furthering the health, the instruction, the recreation, the comfort and the convenience of the people in general, and of the working classes in particular. Public halls and gardens, libraries and museums, art galleries, technical and trades schools, public baths, wash-houses, low-priced dwellings, cheap lodgings, playgrounds for the children, and free music in half-a-dozen places at once—these are the privileges already within the reach of the meanest citizen in any large British centre.

What of the
Future?

I believe we shall see, during the next quarter century, advantages provided by the modern city for its citizens such as we have not yet even dreamed of. The trend of the age is toward municipal socialism, and, in hands that can be trusted, this need not present an unwelcome outlook. For the many there are certain privileges which the state alone can provide. These advantages, only the rich may enjoy if left to individual effort. What magnificent possibilities for benefiting one's fellow-men lie open to those who are to work out the science of municipal administration in the light of the twentieth century.

LECTURE II.—OCTOBER 11TH, 1895.

HISTORY AND DEVELOPMENT OF LOCAL MUNICIPAL INSTITUTIONS.

BY HERBERT B. AMES, B.A.

To Jacques Cartier, the intrepid Breton navigator, is due the honor of having been the first European to set eyes upon the land now occupied by the city of Montreal. The date of his arrival, October 2nd, 1535, just 360 years ago, is therefore the earliest of which we need take cognizance. Jacques Cartier founded a thriving Indian village, Hochelaga by name, of which he gives us some account. He made, however, no settlement, and it was not until 1611, when Champlain landed at what is now known as "Place Royale," that any attempt was made to mark the spot by clearing the forest or erecting shelter. Thirty-one years later, on May 18th, 1642, Paul de Chomedey, Sieur de Maisonneuve, whose statue has but recently been unveiled in Place d'Armes Square, landed and made the first permanent European settlement. His undertaking was mainly of a religious character. Montreal was founded as a missionary outpost in the heart of the wilderness. The little hamlet, which lay close along the river, was surrounded by palisades of wood and stone. Notwithstanding the attempts of the Iroquois to massacre the colony, it continued to hold the ground acquired, and became in time an important fur-trading post. It is not necessary to our purpose to follow the historical development of the town from the time of Maisonneuve down to its capture by General Amherst, on September 8th, 1760. At the time of the capitulation, Montreal contained about 3,000 inhabitants, (see "Ville Marie," Alfred Sandham, 1870, page 65) it stretched along the river bank from Dalhousie Square Station to McGill Street, and the Northern wall ran just above Craig Street, the fact being kept in mind by the name "Fortification Lane." Along what is now Craig Street, then ran a small river. Within a few years after the conquest there was a

Historical:
Founding of
Montreal; its
Growth in
Population
and Wealth.

considerable English population in Montreal. This came from two sources—first, direct immigration from Great Britain; and, secondly, the influx of the so-called U. E. Loyalists from the American Colonies. Early in this century we find Montreal the largest city in Canada, a pre-eminence which she has never lost. Up to 1850, Montreal was little more than an inland trading centre, a half-way house between England and Upper Canada, with a population about equal to that of Ottawa or Hamilton to-day. There was no railway communication, and only vessels of 400 tons burden could come up the river. In 1851 the St. Lawrence & Atlantic Railway was the first to reach the city. Two years later the Grand Trunk line, between Montreal and Portland, was completed; in 1855 this system was extended to Brockville, and in 1860 the Victoria Bridge was opened. Parallel with this era of railway development in 1851, the Harbor Commissioners commenced serious work in deepening the channel between Montreal and Quebec, and continued operations until at the end of twenty years, vessels of 4,000 tons were to be found along the wharves of Montreal. The impetus given to the growth of the city by these enterprises, as shown by the following statistics, was very great. In 1760 the population of the city was 3,000; in 1825, 22,357; in 1851, 57,715; in 1861, 91,006; in 1871, 107,225; in 1881, 140,747; in 1891, 211,302; and it is probably very little short of 250,000 to-day. The wealth of the city has increased even more rapidly than its population. In 1861 the valuation of real estate, as per assessment roll (including exemptions) equalled \$23,441,230; in 1871, \$43,875,580; in 1881, \$79,883,445; in 1891, \$128,413,000; in 1894, \$170,456,315. By comparing these figures it will be seen that Montreal has increased more rapidly in wealth than in population. In 1861 the value of real estate, as per assessment roll, to each unit of population, was \$256, by 1871 it had reached \$410; in 1881, \$566; in 1891, \$608; and it is about \$700 per capita to-day.

Nationality
and Religion
of the People.

At the time of the capitulation there were only 135 Protestants in the entire district of Montreal. In the early "Forties" the nationalities were about equally divided. The census of 1850 shows that there were nearly 5,000 more English-speaking residents than French-speaking at that time, although three-quarters of the population were Roman Catholics. The census of 1861 shows the English-speaking population still slightly in the majority. Since this time, however, the proportion of French-speaking residents has greatly increased. Of the present population of Montreal, three-fifths are French-speaking, and two-fifths English-speaking. Lovell's Census of 1891, which places the population at 211,302, estimated that there are 155,511 Catholics, 53,863 Protestants, and 1,928 Jews. It will

therefore be seen that three-fourths of the population of the city is Catholic. It being probable that the proportionate growth since 1891 has been about the same, the 250,000 which we claim as the population of the city to-day, is, therefore, made up of 185,000 Catholics, and 65,000 of other denominations.

The city, as incorporated in 1840, was divided into six wards. These were named East, Centre, West, Queen's, St. Lawrence and St. Mary's. Five years later we find there are eight divisions, Queen's Ward having disappeared, St. Ann's, St. James and St. Louis having been organized. The year following, this number was further increased to nine, by the creation of St. Antoine Ward. Nine continued to be the number of wards until 1883, when Hochelaga Ward was admitted. The dates of annexation for the other wards are, St. Jean Baptiste, 1884; St. Gabriel, 1887; and St. Denis, 1893.

Between the various wards of the city there is great difference in area, population and importance. This is demonstrated by the following comparison:—

1894.

Wards.	Area in Acres.	Estimated Population.	Estim'd No. of Voters.	Civic Valuation.
East.	58	.....	900	\$5,607,100
Centre.	42	.....	1,000	7,520,100
West.	54	.....	1,200	10,575,200
St. Ann's.	733	25,000	3,800	12,874,890
St. Antoine.	1,062	50,000	6,500	62,221,605
St. Lawrence.	302	20,000	3,500	16,101,710
St. Louis.	242	25,000	4,000	11,266,280
St. James.	381	35,000	5,000	15,405,700
St. Mary's.	621	40,000	5,600	12,759,365
Hochelaga.	1,230	10,000	1,800	5,371,550
St. Jean Baptiste. . . .	308	25,000	3,800	5,925,980
St. Gabriel.	330	15,000	2,500	3,646,655
St. Denis.	720	5,000	1,000	2,207,625
Total.	6,083	250,000	40,600	\$171,483,760

(In the case of the business wards there is a very small resident population.) The need for civic redistribution is great. St. Antoine Ward, which contains one-fifth of the population of the city, and pays over one-third of the taxes, has only one-thirteenth of the representation. According to population this ward has a clear right to two and one-half times its present representation, or considered on the basis of tax paying service, to four times its present influence. During Mayor Grenier's term of office, a plan for redistribu-

tion was discussed. It contemplated the abolition of Centre Ward and its addition to the East Ward, the division of St. Antoine Ward into three, the division of St. Ann's ward into two by the canal, and a similar redistribution of St. Mary's and St. James.

Growth of
Municipal
Institutions in
this Province.

Under French rule there was absolutely no local self-government. Matters of the most trifling importance, and of purely local character, were directed by the Council and the French Intendant at Quebec. Up to as late as 1832 the Legislature of Quebec was practically a municipal council for the whole of this province, and the unwillingness on the part of the French-Canadians to consent to any measure of local taxation, proved an effective barrier to the introduction of a workable municipal system throughout the province. With the union of Upper and Lower Canada in 1841, however, municipal institutions were introduced, and by the time of confederation in 1867, had become fully developed.

Source of Our
Municipal
Legislation.

According to Article 92, clause 8, of the British North America Act of 1867: "In each province the Legislature may exclusively make laws in relation to (8) Municipal institutions in the province." It is therefore the Legislature at Quebec which passes laws regarding their local government for the various municipalities of this province. Should a municipality desire a special code of laws, other than that common throughout the province, such municipality applies to the Legislature for a charter, and becomes incorporated under an act granting special powers. The Legislature has the right to amend this charter from time to time, and even to revoke it altogether. The local municipal authorities exercise power, therefore, in accordance with statutory enactment; and when they go beyond their carefully defined rights, they can be restrained by the courts after a legal process. Throughout the province of Quebec the local municipalities comprise parishes, townships, towns and villages. These are governed by Councillors, usually seven in number, chosen by the rate payers of the district. A majority of each local council chooses one of its members to act as its head, or Mayor, and the Mayors of all the local municipalities within the county, form the County Council, to deal with matters relating to the general interest. (Vide, Bourinot, "How Canada is Governed," pp. 226-240.)

Development of
the Municipal
System of
Montreal.

Montreal, during the French rule, was nominally in charge of local governors, but was really, like the other towns and villages, under the control of the Council and Intendant at Quebec. Of these local French governors there were sixteen, and the names of some are still preserved in the nomenclature of our streets, such as Maisonneuve, Berthelot, Lemoine, Vaudreuil and others. After the conquest, for a brief period, the city was under direct military

rule. The first English Governor of Montreal and district was Brigadier General Gage, who proved very satisfactory to the inhabitants, and whose untimely death was much deplored. In 1764 Civil Government succeeded the Regime Militaire, and regular Courts of Justice were established. "From 1796 to 1833, the municipal affairs of this city were administered by Justices of the Peace, sitting in special sessions for that purpose." In 1832 the city was for the first time incorporated, Royal assent being given to this Charter of June 15th. This Charter is legally known as I. William IV. Chap. 59. It was of an experimental character and expired on May 1st, 1836. For some years it was not renewed, as about this time the city and province passed through the troublous times connected with the Rebellion of '38 and '39. Under this Charter the first meeting of the Corporation was held on June 5th, 1833. Jacques Viger, from whom Viger Garden is named, was the first Mayor of Montreal. In the Charter of 1832 the city is described as "The Corporation of Montreal." Now, a corporation is "an artificial or fictitious person created by law and capable of acting within prescribed limits, as if it were a natural person." This corporation was granted by its first charter, certain powers to borrow money for public works, was authorized to hold property, to sue and to be sued, and to have a common seal, etc., etc. This original charter was very short, containing but twenty-six articles. In those days citizenship was limited to proprietors only. The Mayor then had a considerable degree of executive power, and it was his duty to see that the existing laws for the governing of the city were enforced, and any infraction of them duly punished. In 1840 the city was again incorporated, this time permanently, and received its second charter. This charter emanated from the Governor of Lower Canada and Special Council, and attached to it is the signature of C. Poulett Thomson. In legal parlance it is known as, 3-4 Vict. Cap. 36, and was assented to on June 25th, 1840. It contains fifty-six articles, and forms the basis of all succeeding legislation affecting the city. Some provisions in it are worth noting. The City Council was to meet four times during the year, each session not to exceed three days. The tax was limited to a shilling on the pound assessed value of property, and the debt could not exceed the aggregate amount of five years' income. Any by-law passed by the City Council might be disallowed by the Governor. On March 29th, 1845, an Act (known as 8 Vic. Cap. 59) was passed by the Legislature of the Province of Canada, to amend and consolidate all previous enactments dealing with the city. This consolidated charter contained eighty-three articles, and in it we notice a gradual withdrawing from the general municipal law of the pro-

1851. vince, and a substitution of special provisions of local value. Several amendments were passed during the next six years, and in 1851 it became necessary to amend and a second time consolidate the city charter, and to vest fresh powers in the corporation. This consolidation is known as 14-15 Vic. Cap. 128, and the number of articles has herein grown to ninety-six. It contains elaborate provisions for the establishment of Recorder's Court to take the place of the old Mayor's Court, and introduces many police regulations.
1874. Between 1851 and 1874 there were upwards of a score of Acts passed affecting the charter of the City of Montreal. In this year we find a revision and third consolidation (37 Vic Cap. 51) enacted by the Legislature of the Province of Quebec. This charter, which is the father of our present one, contains 247 clauses, and in its titles and arrangement is very similar to the one with which we are now familiar. The final consolidation, which is the present city charter, was accomplished under the guidance of Mayor Abbott, in 1889. (52 Vic. chap. 79.) To this has also been added at succeeding sessions of the Legislature, no less than eight distinct amendments altering more or less the purport of the original clauses.
- 1889.

Resumé of
the Present
Charter.

Turning, now, for a brief glance at the charter of the City of Montreal, at present in force, we find it to be a pamphlet ten inches by six and one-half, containing 59 pages, (exclusive of such portions of the provincial election act as are applicable to civic elections.) The amendments to this charter are contained in about 40 pages more, but it is probable that if consolidated, 100 pages would suffice. This charter contains 285 articles and 16 schedules, these latter being prescribed forms for the transaction of business by the city clerk and others. The first four articles of the charter contain interpretative provisions and the statement of incorporation, name, and general powers. Articles 5 to 11 define the city's boundaries, its division into wards, and give the method of procedure by which the city's limits may be extended. (See close of this lecture.) Sections 12 to 29 treat of the composition of the Council, of the Mayor and his duties, of qualification and disqualification on the part of Mayor and Aldermen. (See lecture iii.) Sections 30 to 52a relate to municipal electors, voters' lists, revisions of the same, municipal elections and their contestation. (See lecture x.) Sections 66 to 80 treat of the meetings of Council and the officers thereof. (See lecture iii.) Sections 81 to 139a treat of taxation and finance. (See lecture iv.) Sections 149 to 206 treat of the Recorder's Court, its jurisdiction and procedure. (See lecture vi.) Sections 207 to 254 deal with matters pertaining to streets and highways, expropriation, special assessments, and the widening of special streets. (See lecture v.) Sections 255 to 267 contain provisions relative to the construction and operation of water-works, (see lecture vii.), while

the remaining provisions of the Act, from 268 to 285, are of miscellaneous character.

Returning, now, for a few words in closing, in fuller explanation of the opening provisions of the charter we find the Act entitled, "An Act to revise and consolidate the charter of the City of Montreal, and the several Acts amending the same." It was assented to on March 21st, 1880. The clause dealing with incorporation reads as follows: "The inhabitants of the City of Montreal, and their successors, inhabitants of the same, shall be a body corporate, in fact and in name, by and under the name and title of "The City of Montreal," and as such shall have a common seal, with power to 'break, renew, change and alter the same at pleasure, and shall 'be capable of suing and being sued, and of pleading and being 'impleaded, in all courts of law and equity, in all manner of acts, 'causes and matters whatsoever, and of accepting, taking, purchasing and holding goods and chattels, lands and tenements, real and 'personal, movable and immovable estate, and of granting, selling, 'alienating, assigning, leasing and conveying the same, and of entering into and becoming a party to contracts, and of granting 'and accepting bills, bonds, judgments, or other instruments or 'securities for the payment or securing the payment of any money 'due by or to the corporation, and the performance of any other 'duty, matter or thing whatsoever."

Such Provisions
of the Charter
as belong to
this Lecture.

A Corporate
Body.

The charter then goes on to state that the City of Montreal shall comprise a tract of land situated within boundaries shown and specified on a plan of the city, of which a copy can be seen at the City Surveyor's office at the City Hall. Upon this plan the city is divided into twelve wards, and since the charter was enacted a thirteenth ward has been created. The boundaries of the several wards are enumerated and specified upon the plan. The method by which the city boundaries can be extended is then explained. Briefly, it is as follows:—A by-law setting forth the proposed plan is introduced into the City Council, and receives during its first and second reading the support of the majority of the Council. This by-law states whether the annexed territory shall form a ward of itself or be added to one of the existing wards. Before the by-law can be read a third time in Council, it must be approved by the Municipal Council of the territory affected, and sanctioned by the electors therein who are proprietors in said municipality. Having received the approval of the outlying municipality, the by-law passes then its third reading in the City Council, and is sent to the Lieutenant-Governor for his approval. This being granted, the outlying district becomes annexed, and forms part of the city, subject to the special acts, by-laws, rules and regulations in force throughout the rest of the city.

Boundaries
Defined and
Method of
Annexation
Explained.

LECTURE III.—OCTOBER 18TH, 1895.

OUR LOCAL PARLIAMENT, THE CITY COUNCIL.

BY HERBERT B. AMES, B.A.

Within certain definite limits our City Council is a local parliament in every sense of the word. Its legislation is that which affects us most intimately; in fact it is of greater importance to us that this local government be properly administered than any other, provincial or national.

Historical
Resumé.

Even at the risk of repeating facts brought out in a previous lecture, let us look back over the past half-century and note some changes that have taken place since Montreal was first permanently incorporated. The first corporation, after 1840, was not elected, but was appointed by the Governor-General. Since 1842, however, the members of this body have been elected by the rate payers. The city, in 1840, was divided into six wards: East, Centre, West, Queen's, St. Lawrence and St. Mary's. When Queen's Ward was abolished, and St. Ann's, St. James, St. Antoine and St. Louis created, the number of wards was increased to nine, and each was permitted to be represented by three members in the local governing body. Between 1842 and 1851 it was customary for the corporation to choose from among its own members a person duly qualified to act as mayor. The new election in the proper ward having filled the place thus made vacant, the Corporation again selected nine from among its number, to whom was given the title of "Aldermen," the remaining eighteen holding the title of "Councillors." Thus the municipal governing body in those days consisted of a mayor, nine aldermen and eighteen councillors, the aldermen forming a sort of Upper and the councillors a Lower House. This continued for upwards of thirty years. By the revision of the charter, which took place in 1874 (37 Vic., Cap. 51) the distinction between Alderman and Councillor was abolished, and all the twenty-seven representatives from that time forward were styled Aldermen.

This number increased as wards were annexed, until in 1893, prior to the admission of St. Denis Ward, it reached thirty-six. The term of office for an Alderman was until recently three years, and one-third of the Council came up for re-election each year. By special statute the Council was renewed in toto Feb. 1st, 1894, all the Aldermen having to seek election at the same time. The number of Aldermen was by the same enactment reduced from three to two, and the term of office made two instead of three years.

The Montreal City Council to-day is composed of a Mayor and twenty-six Aldermen. The Mayor is elected by the voters throughout the entire city. He is granted an allowance at the discretion of the Council, not exceeding \$2,000 per annum, and serves but for a term of two years, unless re-elected.

Composition
of Council.
(Charter,
Secs. 12-29.)

Each of the several wards elects two Aldermen. These are paid no salary; their term of office is two years. So, on the first of February every second year (that is, the even numbers) the term of office of the Mayor and every Alderman expires, and to serve again they must be re-elected. Should the Mayor die or become incapacitated during his term of office, the Council has the power to choose from among its own number a successor to fill the unexpired term, in which case the ward from which an Alderman would have been taken might elect a new representative. Four times a year the Council names one of its members, to fill for the ensuing quarter, the position of acting Mayor, a sort of Vice-president of Council, to perform, in case the Mayor be absent, such duties as usually fall on the chief officer.

No person may assume the office of Mayor unless he be a British subject, having resided within the city for the year immediately prior to his election, and, during the six months preceding the date of his nomination, having been the owner of real estate within the city limits in value amounting to \$10,000, clear of all obligations. For the Alderman the requirements are similar, except that the property qualification is fixed at \$2,000, and is based upon the assessment roll. Before the person elected can enter upon his duties either as Mayor or Alderman, he must take the oath of allegiance to Her Majesty, and make written declaration that he is legally qualified as to property to fill the position to which he has been chosen. Should it happen that during his term of office the property which constitutes his qualification passes out of his hands, or becomes encumbered so as not to leave sufficient margin to qualify upon, the Mayor or Alderman can be caused to prove his ownership of sufficient other property to qualify upon, or failing to do this, can be made to forfeit his seat. There are certain persons who by statute are expressly shut out from filling the position

Qualification
for Mayor and
Alderman.

of Mayor or Alderman. Among these are priests and ministers, judges, Privy Councillors, members of the Quebec cabinet, city contractors, civic employees, persons in debt to the city or having a suit against the city for an amount exceeding \$100: all such are ipso facto disqualified from serving as Mayor or Alderman. There is also a provision in the charter (Sec. 25) which provides that any Alderman who is or may become directly or indirectly interested in any contract for work done or supplies furnished to the corporation, becomes forthwith disqualified, and may be unseated. This last provision, however, is not regarded as affecting Aldermen who may be shareholders in a joint stock company doing business with the Corporation, but such members of the Council must refrain from voting upon questions wherein the interests of their company are involved. Should a member of the Council become insolvent, or be convicted of corrupt election practices, or accept one of the positions mentioned above as debarring him from serving, or be absent from the city for more than two months consecutively, without leave, or become interested in any civil contract, such a member would become disqualified.

Meetings
of Council.
(Charter,
Secs. 66-78.)

The Council is compelled by law to meet on the second Monday of each month. As a matter of fact it meets much oftener. The Mayor may, through the City Clerk, call a special meeting of Council whenever he pleases, and is compelled to do so upon being presented with a requisition signed by five Aldermen. A notice of meeting must be served upon each Alderman two days prior to the meeting; this must specify the business to be considered, and no other business is in order except by unanimous consent. Thus, we frequently hear of a member calling out "Next meeting," when new business is proposed. For ordinary business one-third of the Council, that is, nine members, is sufficient to form a quorum; to pass a by-law, however, an attendance of two-thirds of the Council is necessary. Questions are decided by a majority vote. The Mayor has the power, which, however he rarely exercises, of causing the arrest of any member of the Council, or any other person disturbing the meeting; said person may be brought before the Recorder's Court and punished. The officers of the Council, who are in attendance at its session, are the City Clerk and assistant City Clerk. The former sits at a table just below the Mayor. He prepares the orders of the day, keeps the minutes, attends the meetings of Council, and has custody of all records. The minutes of the Council are signed by the Mayor, and are open to the inspection of any rate payer. The assistant City Clerk also attends the meetings of Council. When a question is raised as to the legality of a certain line of action, it is generally referred

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to the City Attorneys, of which there are two, and action thereon deferred until they have made their report.

The City Council has the power to pass enactments having all the force of law. These are called by-laws, and the charter stipulates that the City Council may pass by-laws "For the good government, peace, welfare, improvement, cleanliness, health and economy of the city, and for the preservation of order therein." Section 140 of the charter enumerates seventy-five subjects (this number has since been increased to eighty) upon which the Council has this right to legislate. As yet by-laws have not been passed upon all these matters, but they are enacted from time to time as there is need. The by-laws consolidated September, 1893, form a book 9¼x6¾ inches, containing 400 pages. Entirely new by-laws are rarely passed now-a-days, most of our municipal legislation being confined to amending enactments already in force. The usual method is to repeal an existing by-law, and re-enact an improved one on similar lines. The City Attorney is entrusted with the task of drawing up a by-law upon lines laid down by resolution passed by Council. Every by-law before being submitted to the Council for consideration, must first be printed in both languages. It requires (except by abrogation of the rules) to be read three times at three different meetings of the Council. If it has been read twice and approved by a majority, it is then engrossed and read a third time, when upon passing and being signed by the Mayor, it becomes operative.

A by-law or resolution having passed the Council, its execution is laid upon some department, and the officials of that department, under committee supervision, are expected to put the enactments into force. Offenders who break these city ordinances are arrested by the police, and tried in the Recorder's Court. There is a provision in the charter (Section 144) providing that any municipal elector may petition the Superior Court to annul any by-law or resolution of Council, within six months of its passing, on the ground of illegality, and if the elector can prove that the Corporation exceeded its statutory powers, the by-law or resolution may be annulled. Every by-law is subject to the approval of the Lieutenant-Governor in Council, and may be disallowed within three months, but this provision is rarely, if ever, taken advantage of. The City Council is governed in its deliberations by "Rules and Orders of Council." These are contained in a little hand-book and have been in force since May 8th, 1863.

We now come to a consideration of the executive function of the Council. The Mayor is regarded as the chief executive of the city. He exercises nominal control over all the officers of the Cor-

The City Council as a Legislative body.
(Charter, Secs. 140-148.)

The Duties of the Mayor.
(By-Law 41.)

poration, and it is his duty to see to it that all the by-laws and regulations of the city are faithfully enforced. He may, from time to time, make recommendations to the Council for the improvement of any department, as he may deem desirable. He signs all contracts, agreements, etc., in the name of the city, and none are valid until so signed. The Mayor of Montreal also has the power of issuing certain licenses. No circus, menagerie, or show can exhibit within the city without having first procured his permission. Our Mayor has little to say regarding the appointment of officials, nor has he the power of veto. In the legislative sessions of the Council he only votes in case of tie.

Committees.
(Charter,
Sec. 29.)

The executive work of the Council is mainly done through the committees. Shortly after the election of a new Council, usually about the middle of February, the Corporation, as the result of an unofficial caucus, appoints from among its members certain Standing Committees to control and direct the work of the various civic departments. These committees are eleven in number, and contain seven members. The Chairman of each committee acts as its spokesman in Council, and sits in the front row of seats encircling the Mayor's chair. The duties of most Standing Committees are specified by by-law. These committees are not legislative, but executive bodies. They consider all matters relating to their several departments, and make reports and recommendations from time to time to the Council. The Council discusses these reports, and if it sees fit, ratifies and puts the ideas into effect by resolution or by-law. Any report entailing the expenditure of public money must also have the approval of the Finance Committee, although it has been known to be the case that a Committee not sure of the consent of the Finance Committee, has reported direct to Council in the hopes of getting a majority therein. The Standing Committees of the Council take to themselves the power to suspend or dismiss, as well as to replace or engage, sub-officers, clerks and underlings in their respective departments. The following positions, however, are regarded as in the gift of the Council, and cannot be interfered with by any Committee:—City Clerk, Assistant City Clerk, City Surveyor, Deputy Surveyor, City Treasurer, City Auditor, Acting Supt. of M. W. W., Accountant M. W. W., Chief Engineer Fire Dept., the four Assistant Chiefs of the Fire Dept., and the twelve Market Clerks; the City Assessors and staff are regarded as officers of the Finance Dept.

The Several
Departments
and Their
Work.

The eleven Standing Committees of Council are designated as follows:—Finance, Roads, Police, Fire, Water, Markets, Light, City Hall, Health, Parks and Ferries, Mount Royal Park. Besides these Standing Committees there is also what is known as a "Board of

Chairmen," a sort of cabinet composed of all the chairmen of the above Committees. This meets together to mutually determine how the funds shall be apportioned among the several departments, and it also considers proposed charter amendments.

The chief duty of the Finance Committee is to pass upon reports of other Committees, which entail an expenditure of the public money, and to decide whether such expenditure is necessary and proper. This Committee also has the supervision of the measures taken to collect moneys due the city, and its general expenditure. The chief officers under its supervision are the City Treasurer and the City Comptroller and Auditor. These officers are in reality not servants of the Committee, but of the Council, and they make their annual report to the Mayor and Aldermen.

The duties of the Road Committee are to control the measures taken by the Road Department for the maintenance of the roads, repairing of the pavements, cleaning and watering the streets, removing the snow, laying down wooden side-walks, care of the public squares, maintenance of the sewerage system, etc. The chief officer of the Road Department is the City Surveyor, with a salary of \$5,000 per annum. His deputy receives \$2,200. The City Surveyor reports annually to the Council, and his subordinates makes reports to him, which are embodied in his report to Council. Besides the work of the Road Department and the maintenance of the streets and sewers, this Department also administers such portions of the loan as are expended for permanent street improvement; such as street opening, widening, etc. This is in fact the great spending department.

The Police Committee deals with questions relative to the police force. It supervises the governing, regulating, arming, clothing, rating, paying of the men; the residence, qualification, arranging of service, inspection and distribution of the force. The Superintendent of the Police Department is empowered to issue certain licenses, from which the city derives a considerable revenue. The fire alarm system and the patrol waggons are also under the control of the Police Department. The present Superintendent receives a salary of \$3,500. He reports annually to the Chairman and members of the Police Committee.

The Fire Committee deals with such matters as affect the protection of the city from fire. To this Committee is entrusted control of the Fire Brigade and the inspection of buildings, chimneys, boilers, etc. The chief executive officer of the Fire Department receives a salary of \$3,000. The Chief of the Fire Brigade, the Inspector of Buildings, and the Inspector of Boilers all report annually to the Fire Committee. (Fy-law 34.)

The Water Department of this city is under the direction of the Water Committee. The aqueduct, wheel-house, engine houses, reservoir, pipe track, hydrants, fountains, meters, etc., are under its care. This Committee, however, has nothing to do with the collection of the water rates, which duty falls upon the City Treasurer. The Superintendent of the M. W. W. annually reports direct to the Council, his subordinates all reporting to him. (By-law 65.)

The Markets Committee is entrusted with the care and rental of the markets, and the regulation of the abattoirs. In recent years several of the public markets have been done away with, and small squares opened in their place, so that the duties of this Committee are hardly as onerous as heretofore. At each market is located a clerk, sometimes with an assistant. These all report to this Committee.

The Board of Health includes seven members of the Council, who are styled the Health Committee. As a Committee of Council these Aldermen superintend the work of scavenging, removal of night-soil and dead animals, maintenance of the civic hospital, burial of the unclaimed, vaccination and disinfection, inspection of milk and food, public baths, direction of the sanitary police, etc. The Chief officers of the Health Department are the Medical Health Officer, the Sanitary Engineer, and the Superintendent of the Scavenging department. These last named officials report annually to the Board of Health, and the Medical Health Officer compiles an annual report as to the sanitary condition of the city, containing vital statistics, and other matter.

Of the less important committees little need be said. Their names sufficiently define the work entrusted to the care of the Parks and Ferries Committees and the Mount Royal Park Commission. The Light Department has no special officers. It is only called upon when some contract relative to the lighting of the city is to be made. It is further entrusted with the duty of seeing that the companies with whom arrangements are made for the lighting of certain portions of the city, faithfully keep their agreements with the city. When there is need of an executive officer, the work is performed by the staff of the City Surveyor. The City Hall Committee is responsible for the condition of the City Hall, and for the printing and stationery which may be needed for the use of the Council and officers therein. These last four Committees publish no annual report. It is thus that the executive function of the Corporation is fulfilled.

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LECTURE IV.—NOVEMBER 1ST, 1895.

MUNICIPAL FINANCE AND TAXATION.

BY WILLIAM ROBB, ESQ., Treasurer City of Montreal.

In attempting to explain "Municipal Finance" it would be well, perhaps, to commence by showing the origin and growth of civic debt.

When people emigrate to new countries they live isolated or separate lives at first, the family being the largest aggregation; but after a while, the nucleus of villages are formed by the subdivision of labor; one man commences to do nothing but carpenter work, another starts as a blacksmith, a third as a tailor, a fourth as a shoemaker, and so on, while some one opens a general store for the stock and provisions which all require. Gradually these increase in number until there are many storekeepers, carpenters, blacksmiths, etc., and the various other trades which population calls into existence. Still it is primitive life—each householder has his own well, and each provides his own system of sewerage. But as the villages grow in size this becomes more and more inconvenient. A main sewer to carry off all the drainage becomes desirable, and a system by which water will be carried to each house, a necessity. Up to this time any little expense for police protection, street lighting, etc., has been defrayed by a small annual assessment on each householder, but now they are face to face with some of the greater requirements of modern civilization; they assemble to discuss the matter and decide to inaugurate them. Now the question presents itself: shall we pay for them at once or shall we borrow money on the security of our homesteads, and content ourselves with paying only the interest? On the solution of this depends the issue of debt or no debt.

Now there are certain expenditures in all cities which are classed as "General and Ordinary," as distinguished from those which are "Special and Extraordinary." The general and ordinary expenses

Origin and
Growth of
Civic Debt

The Two
Classes of
Expenditure:
Ordinary and
Extraordinary.

comprise police and fire protection, maintenance of roadways and sidewalks, street lighting, and other things that come under the head of "Administration." The cost of these is raised by taxes spread, as equally as possible, over all the inhabitants. On the other hand, when extensive "Special Work" is undertaken, such as the construction of waterworks or the inauguration of a drainage system, the first cost of which would be too heavy a tax to be paid by the citizens at one time, resort is had to borrowing, and from that time forth the interest cost of the sum borrowed has to be added to the administration items, and paid out of the annual taxes. This is the way in which the debt of a municipality commences. If the work is of such a character as to serve future generations, and of a nature to yield a revenue, or effect a saving, equal to the annual cost, then it is justifiable that the generation creating the debt should have nothing more to pay than the annual interest. If, on the other hand, the work is of a transient nature, undertaken solely for present convenience or gratification, then the whole cost should be paid at once, and to add it to the debt of the city would be unjustifiable. Chief among the former, as already alluded to, may be mentioned "Water Works," "Main Sewers," "Parks," and the various permanent buildings required for municipal purposes, as it is manifest they continue to be as useful to succeeding generations as to the one which undertook them; while some, such as Parks, will increase in value, beauty, and capacity to afford pleasure and benefit as the years roll on. By such is created what is called the "Funded Debt" of cities, and the interest cost thereof forms part, and sometimes a very large part of the amount which is required to be raised by taxation.

The Funded
Debt of
Montreal.

As you are all citizens and prospective ratepayers of this good city of Montreal it may be interesting to show you what its present debt is, and you may calculate, if you please, what it is likely to be when you will have to share its burden. The Funded Debt of Montreal, then, at the present moment is over \$24,000,000, costing about \$3,000 a day for interest,* and has been made up as follows :

Water Works	\$9,000,000
Street Pavings	4,000,000
Street Improvements	3,000,000
Aid to Railways Harbor, etc.	2,000,000
Main Sewerage	2,000,000
Municipal Buildings	2,000,000
Park	1,000,000
Miscellaneous	1,000,000
	<hr/>
	\$24,000,000

The three millions for street improvements represent the city's share of these alone. A much larger amount has been paid (or has yet to be paid) by the proprietors interested for their share of the cost.

I have been asked to explain to you the manner in which cities borrow this money, and perhaps it were well to do so here. In the first place, a Canadian city, before it can borrow money, must have received a "Charter" from the Legislature of the Province in which it is situated. A "Charter" is just a deed from a government, conferring certain powers and privileges, and which gives to a city an individual existence in a corporate form. Its name is made to mean and represent the whole body of the citizens, and they can thenceforth borrow money by issuing obligations which acknowledge that the city has received the amount mentioned in them. These "Obligations" are in the form of "Coupon Bonds," or "Registered Stock," and are signed by the Mayor and one or more of the City Officials.

"Coupon Bonds" are so called because they have small oblong coupons attached to them for every interest payment which be-

How Cities
Borrow Money.

Coupon Bonds
and Registered
Stock.

*The estimates for 1896 place the interest account as follows:—

\$ 586,500..Permanent Stock at 7 p. c...	\$ 41,050
1,100..Terminable Stock at 7 p.c...	77
487,500..Stock at 6 p.c...	29,250
240,000..Stock at 5 p.c...	12,000
3,316,142..Stock and Bonds sterling at 4 p.c...	165,807
2,840,200..Stock and Bonds, 1881-7, at 4 p.c...	113,608
7,008,000..Sterling at 3 p.c...	210,240
4,866,667..Stock, 1892, at 4 p.c...	194,666
200,000..Stock, 1893, at 4 p.c...	8,000
2,000,000..Stock, 1894, at 4 p.c...	80,000
1,000,000..Harbor Bonds at 3½ p.c...	35,000
90,000..Hochelaga Bonds at 7 p.c...	6,300
35,000..St. Jean Baptiste at 7 p.c...	2,450
65,000..St. Gabriel at 6 p.c...	3,900
20,000..Cote St. Louis at 7 p.c...	1,400
100,000.. " " 5 p.c...	5,000
<hr/> \$22,856,109 Total Funded Debt...	<hr/> \$ 908,753
\$ 1,413,667..Temporary Bonds in London at 3½ p.c...	\$ 49,480
2,000,000..Overdraft here at 4½ p.c...	90,000
1,000,000..Revenue Anticipations, say...	30,000
Interest on Floating Debt...	11,767
Exchange, Discount, and Commission...	10,000
<hr/> Total interest...	<hr/> \$1,100,000

comes due during the time they have to run. Thus, a Bond running 25 years, with interest payable semi-annually, would have fifty of these "Coupons" attached to it, one of which the holder cuts off every six months and presents it for payment, and it becomes, at once, the evidence that he is entitled to the amount and a receipt to the city which redeems it. This word "Coupon" is from the French "Couper" (to cut), and simply means a piece which may be cut off. These Bonds are "payable to bearer," and are therefore, negotiable or transferable certificates which may be passed from hand to hand like bank bills. "Registered Stock," on the other hand, is represented by a certificate issued to the party purchasing it, which declares, on its face, that the holder, whose name is embodied in it, is inscribed on the books of the city as the owner of so much of its stock, and that the capital and interest are payable to him alone. It cannot, therefore, be transferred from one person to another without the formality of their going to the City Hall, either personally or by attorney, and signing a transfer on the books of the city, in the presence of witnesses, but it forms a much safer investment and is a favorite class of security. In raising money by either of these modes it is usual for a city to advertise the amount which it wishes to borrow, stating the legal authority which it has for doing so, the purpose for which it is required, and all other particulars which lenders are naturally desirous of knowing, and asking them to "tender" for it in whole or in part, when the highest tenderer becomes the possessors of the securities.

The Floating
Debt of
Montreal.

So much for the Funded debt. There is, however, another division of municipal accounts, entirely distinct and separate from it, which it is important to understand; it is called the "Floating Debt Account." This account includes the multifarious items which arise in all large corporations, and which do not belong to either the funded debt or revenue accounts, and as it is a branch with which confusion frequently arises, I should like to make it clear to you. Broadly speaking, the Floating Debt Account consists of such special liabilities as are represented by special assets. In other words, it should, to use a familiar phrase, take care of itself. The extent of it does not matter so very much so long as there are bona fide assets to the full amount of its liabilities. The principal items which compose it are the proprietors' shares of "Street Improvements," which, having first been paid for by the city, out of the proceeds of temporary loans obtained for the purpose, have to be collected in order to redeem the Bonds issued for them. You will thus see that if \$1,000,000 is due, in this way, to the city, the city on its part must owe a million to some-

body for it, and that the whole of the debt so due to the city must be held sacred to the liability incurred for it. But while "Street Improvements" on the one hand, and "Temporary Bonds" on the other, illustrate the Floating Debt Account, it is by no means confined to these. Deposits made by contractors to guarantee work; percentages retained on contracts for the same purpose; sums left in the hands of the city awaiting completion of transactions, and the thousand and one other things which arise outside of both the "Revenue" and "Funded Debt" accounts go to make it up; but however numerous they may be, no portion of them is available for expenditure on account of either one or the other of these. To sum up, the whole of the proceeds of loans on Funded Debt Accounts are applicable to expenditure on permanent work. The whole of the annual revenue is available for current administration. The whole of the assets in Floating Debt Account are required for the redemption of its own liabilities.

The function of a national government is, broadly speaking, the administration of justice, the providing of facilities for the development of trade, and the defence of life and property, and, on the principle that the citizens of a state should contribute to its maintenance in proportion to the wealth which they have accumulated under its protection, a national government may raise its revenue by the highest and purest of all forms of taxation—an "Income Tax." The function of municipal government is different. Its fundamental object is the providing of those conveniences which are necessary to the development of real estate, and without which it would be of little avail, and hence we find that in its inception, municipal taxation is levied, not on the amount of the taxpayer's general wealth, but on the value of the real estate which participates in the benefits of its expenditure.

Where special privileges are accorded, or exceptional use made of any of the facilities provided by the general expenditure, special taxes are, very properly, imposed, over and above the general taxation to which all are subject, and such special taxes should, as far as possible, be made commensurate with the value of the privilege granted. Chief among such are Gas Companies, which use the streets of the city for the pipes by which they supply their customers; Street Railways and Telephone Companies, which occupy the thoroughfares with their rails and poles. These, and such as these, obtain exclusive privileges, and become possessors of valuable franchises in which they are protected and secured from competition; they therefore become the legitimate objects of "Special" taxation—the best form of which is a percentage on their earnings. Thus the Street Railway of our own city pays a percentage which this year will amount to about \$40,000, besides contri-

Difference in
the Principles
Underlying
National and
Municipal
Taxation.

"Special"
Municipal
Taxation.

buting to the removal of snow. You will thus see that the principle underlying "Special Taxation" is that of "Quid pro quo." It is justifiable only where special privileges are accorded, and should be regulated by the extent of these.

The Water
Rate in
Montreal. Is
exorbitant?

Before I leave this subject, just a word about our water rates. We often hear the statement that they are high as compared with other cities, and New York is frequently cited as an illustration, but this impression arises from imperfect knowledge. In New York and other large cities of the United States, the water rate is a mere nominal one covering the cost of administration, while the interest cost of the system is included in the assessment on real estate. If the cost of our water works had not been kept separate from the rest of the debt, there need have been no separate tax for water at all, and then Montreal would have been cited as a city where water was free, which would have been just as erroneous as the statement that it costs in New York only a fourth of what it does here. The obligations of a city require a certain revenue, and whether that revenue is raised in one single tax on real estate, in a subdivided one partly on realty and partly as water-rate, or in a triplicate form under the heads of realty, personalty and water, matters little so long as it falls equitably on all and that real estate is not made liable for more than its fair share of the whole. Equity requires first the imposition of special licenses on everything which has had any special privilege or exceptional advantage conferred upon it to the full value of that privilege, and afterwards, the striking of a general rate embracing the whole community.

Composition
of Revenue.

And now, having said so much about the mode of taxing, it may be instructive to look at the actual figures of our own revenue. It is derived as follows:—

From taxes on Real Estate, say	\$1,600,000
Water Rates	650,000
Business Taxes and Licenses	450,000
Market Revenues	80,000
Miscellaneous Items and interest	20,000
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	\$2,800,000

And its expenditures nearly as follows:—

For Interest on Debt	\$1,100,000
School Tax	300,000
Fire and Police Departments	500,000
Road and Water Department	500,000
Street Lighting	150,000
Miscellaneous	100,000
Health, Markets, Parks, etc.	150,000
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	\$2,800,000

These were the figures of 1894, those of the present year will be larger, and the Council is now exercised with the consideration of ways and means to increase the revenue.

In closing let us enumerate the privileges the average citizen enjoys in return for his assessment and water rate. He has water carried to his house, where he can distribute it to every room and passage in it if he so desires, and use it in unlimited quantity; a system of drainage to carry it off as fast as he uses it; well paved streets and side-walks to drive or walk upon; electricity to light them up at night—equal almost to daylight; police to guard his premises; a fire alarm system ever on the alert to give intimation of fire; firemen ready at every hour of the day and night to rush to his house if it is in danger; Health Officers watchful to prevent causes of disease from accumulating near his dwelling; scavengers to remove all refuse, and incinerators to burn up all dangerous matter; water sprinklers to keep the road dust from annoying him in summer; snow-ploughs and rollers to make agreeable walking and driving in winter; beautiful squares scattered through the city, embellished with flowers and furnished with seats for his rest and comfort; constant supervision of buildings to prevent their falling down upon him, and continuous inspection of boilers to prevent their blowing him up, and if with all this he is still unhappy, he must be a very unreasonable taxpayer indeed.

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LECTURE V.—NOVEMBER 15TH, 1895.

OUR STREETS AND DRAINS.

BY PERCIVAL ST. GEORGE, C.E., City Surveyor of Montreal.

"I have been asked to say a few words on city Roads and Sewers, and I presume you do not want me to talk to you as an engineer on this subject but more to show you what is the way to provide a city with good roads and good sewers in the most economical and efficient manner, and how to form laws to attain that end.

Necessity of
Good Roads.

To give good roads to a city is one of the vital points in first settling a town, but is generally the last thing the inhabitants think of. Montreal is a city that has grown from being a small town, built with narrow streets, and which has outgrown its first conception, being built after the old-fashioned towns of the north of France, where inhabitants built close to the river and within fortified walls, and whose streets consequently were narrow, so as to occupy all the available space within those walls. As the town grew outside these walls, the property holders laid out their land with streets the most convenient to themselves, and without any regard to their neighbors' property, consequently the streets in many places do not coincide with each other, and therefore are irregular and do not join each other. This state of things induced the City Government to adopt a plan for street widening and opening, in the year 1875, which was made law, and bound citizens to build to the new line, which has caused a large expenditure of money in widening and improving the streets. The law had become necessary in order to improve the appearance of the streets, but in some cases it has been a hardship, but it was a hardship necessitated by the condition in which the great growth of the city found itself, and some means had to be taken in order to make the streets wider. The principle adopted, of compelling the proprietor to build to the new line, compelled the city government to spend a large sum of money to expropriate land, and in order to collect the money they

How Streets
are Improved.

had to place the cost of the expenditure upon the property holders most benefited by the improvement. If this law had been adopted some thirty years before, the hardship would not have been felt, and it is a lesson to all of us who have any interest in good city government, to have a town laid out from the start with wide and straight streets, irrespective of individual property holders. The expropriation became expensive because proprietors brought forward witnesses who exaggerated the values of the property, and the Commissioners awarded the expropriated much more than the property was assessed for; in fact, in some cases over 200 percent. This could be amended by having a law to expropriate by giving the proprietor say from 25 to 50 percent above the assessed value. This percentage would compensate for the forced sale, and the assessment roll would be increased, and the proprietor would not object to it, as he would look forward some day to being expropriated himself. Notwithstanding the great expenditure which has been incurred, no one can reasonably say that the great majority of the streets of this city have not been greatly improved, and if the town has become more regular in the width and straightness of its thoroughfares it is from this expropriation law.

As to the pavements of the thoroughfares, from being poorly macadamized roads, they have now taken the form of well paved streets, the basis of which has been the adoption of concrete foundations. As long as the foundation of a roadway is in concrete, the surface of it is of minor importance, as that can be made in any material suitable to the traffic. The plan generally adopted for heavy traffic, has been granite blocks laid upon the concrete foundation, and where the traffic is lighter, asphalt was used where the people required a less noisy pavement than the granite blocks. Before the asphalt was used, citizens requested to have wooden blocks, which, although noiseless when laid, is not a pavement that will stand long wear in this climate. The asphalt which was used, although not as noiseless as the wood, is better adapted to the climate, although at times somewhat dangerous, being very slippery at various periods of the year, of short duration, namely: in the autumn when the rain freezes on it, and in the spring. The pavements have been paid for by the city generally, and not as in the United States, where all paved streets are paved by the proprietors abutting on the street. In London the rule adopted is this:—A proprietor who cedes a strip of land to the city government for a street, has to pay at his own cost for the grading and forming of a gravel road with stone curbing on the side, and with flagstone sidewalks; the city will not accept any street unless with these conditions. They have also to place in that street a sewer, the

size of which is decided upon by the city, and to be built to such a depth as the city may decide, and the proprietor has to deposit an estimated sum of money for the payment of same. The proprietor can, however, decide who shall be the builder of that sewer, but the sewer must be built under the inspection of the city. Whenever the city may think necessary to place upon that roadway a more permanent pavement, they do so at their own expense, and the proprietor has no further expenses to make on the property which he has given to the city. This law appears to me to be more equitable than either our laws here, or the laws of the United States, to the proprietor, and more especially to the citizens at large.

Specifications.

In paving a street, the contractor takes the ground as he finds it, and excavates or fills to the required depth for the sub-grade, excavating all vegetable or spongy matter, and filling with good material to the required grade. This sub-grade must be given the same crown and foundation as the top of the pavement, and also be thoroughly rolled. Upon this foundation the concrete for the pavement is laid, and is composed of one part best Portland cement, three measures of clean, sharp river sand, and six measures of broken stone ($2\frac{1}{2}$ " cubes.) The sand and cement must be thoroughly mixed dry, and then made into a mortar with the least amount of water (about 20 percent). The broken stone will then be quickly incorporated with the mortar and rapidly mixed, spread and thoroughly compacted by ramming gently with a wooden rammer—about nine inches square—until free mortar appears on the surface. This concrete must be six inches thick, perfectly smooth, and cambered to the same level as the finished road surface; then it shall be allowed to set to the satisfaction of the engineer for at least seven days before the top wearing surface is laid on it. The pavements—or wearing surface—used in the city are tamarac blocks (plain and creosoted), granite, Syenite, Porphyry and Scoria blocks; Trinidad and Sicily rock asphalt, and these pavements are laid on the concrete foundation.

Sidewalks.

In permanent sidewalks, we have in use New York blue stone flags, asphalt mastic and various cement compositions under the various names of Granolithic, Firinite, Rockledge and Artificial Stone. The New York flag stone is laid on a bed of 2" of sand, joints thoroughly cemented, and where the flags are laid only in the centre of the walk, the sides are filled in with composition of coal tar and ashes, prepared and laid in an economical manner by the Road Department. Some of the main streets of the city were laid in this manner in 1875 and 1876, and are in first class condition yet. Asphalt mastic sidewalks have a concrete foundation of 4" in thickness, composed of one part of best Rockland cement, three

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parts clean, sharp, river sand, and six parts broken stones—2" cubes—mixed and spread in the same manner as the concrete, before described, for street paving. On this foundation—when thoroughly set—the asphalt mastic is laid 1" thick, thoroughly smoothed to an even thickness. The mastic asphalt is a manufactured compound, made up of natural asphalt, artificial bitumen and grit. The asphalt is reduced to a powder 5 to 7 percent of artificial bitumen, 20 to 30 percent of grit, and balance powdered asphalt. A ton of this composition will cover an area of twenty yards 1" thick. The asphalt mastic is generally brought on the ground in cakes of about fifty-six pounds each. These have to be melted in the iron kettles used for the purpose, and it is found necessary to add 3 or 4 percent of additional bitumen to replace that lost by evaporation. Cement sidewalks are made of a composition of Portland cement, sand and broken stone, with a wearing surface of 2", made with fine crushed stone; the thickness varies from 12" to 17", according to the name of the patent. All cement and asphalt sidewalks laid in this city, have been guaranteed by the contractors who laid them, from five to ten years, the city retaining 10 percent of the cost of the guarantee. The asphalt paving is also guaranteed for terms varying from five to fifteen years, the city retaining certain percentages from each contract, to cover cost of repairs in case the contractors should refuse to make the necessary repairs when ordered. This money is to be returned at the completion of the term of guarantee, or a written report from the City Surveyor that the street is in good order, and that the terms of the contract have been carried out satisfactorily. Curbstone is now laid on the following dimensions: 9" thick, 12" deep, and from 3 feet upwards in length. This stone is laid on a 6" concrete foundation, the concrete being composed of the same material, and laid in the same manner as previously described. We have used all sizes of stone for curb stone, some being 4" and 5" thick and 12 inches deep, others 6" and from 20 to 30" deep, and in some instances from six to nine feet long, necessitating the use of a derrick to relay them. These heavy stones were probably used in the expectation that the frost would not affect them, but my experience with them has been that they were the most affected by the frost, there being more of them out of order in the spring than of any other kind.

In regard to the proper drainage of a town it is first of all necessary to take levels of the ground, showing the different water sheds throughout and to confine these water sheds to themselves by means of building main sewers separate to its individual water shed. When that has been done, the sewer can be built, which

at first would appear to be larger than necessary, but as they are destined to carry the water from long distances, the utility of them is apparent. This principle in most towns is difficult to undertake, because the first outlay is bigger than the citizens can well afford, and, therefore, many good schemes have been stopped for the time, and have cost more money in the end. The great point for a city is to adopt health laws which will compel proprietors to have sewers built in a street before buildings are erected, and not allow any buildings to go up unless a sewer is built in the street first. The old-fashioned principle of having outside closets connected to the drains should not be allowed, but all sewer arrangements should be constructed within the building, so that the drain shall have the water power to flush them. The method adopted in this city is to charge the cost of sewers in the street, that is, the property abutting on both sides of the street shall pay the cost of a three-feet high by two-feet wide sewer—egg shape. This shape was adopted on account of its bottom being of a 6" diameter, so that the same amount of water that will keep a 6" pipe clean, will keep this sewer clean, and the sewer being three feet high, allows men to enter it to clear out any obstruction that may get there. If the tile pipe system were adopted, it would necessitate having large manholes built every 200 feet, and the sewer would then have to be made on straight lines, so that any obstruction that might happen to get in them could be seen from one manhole to another. This in theory is very pretty, but in practice very difficult to obtain, as a pipe might break and an obstruction get in, which could not be taken out without opening up the street to do so. By having the large size sewer, as I said before, a man can get in to take out the obstruction, and save the cost and inconvenience of opening up the street, and making the pavement above a patch one when repaired. The principle of assessing the proprietors for the cost of the sewer is, in some cases, an unequal one, as the proprietor might happen to build his house upon rock soil, and he would have the expense of building on the rock, while his neighbor—a few feet away—would have earth to build on, and a less expensive sewer to pay for. Therefore, the principle which I think most equitable, would be to get a mean rate of the cost of the sewers throughout the city, and bring all proprietors down on an equal basis. I will give you an example:—In 1893 some sewers cost only 43 cents a foot run to the proprietors, while to other proprietors it has gone as high as \$3.40 a linear foot. You will therefore see why it would be more equitable to strike a mean rate for all.

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(The following is an extract from Dr. F. W. Campbell's lecture No. IX., placed here for the convenience of the reader.)

We are certainly well situated for sanitation. A mighty river flows in front of us at a rate varying from four to six miles an hour. From the river bank the land rises in a series of terraces. We are therefore extremely well placed for carrying out a thorough system of sewerage. The question naturally arises: "Have we such a system?" and I am obliged to answer that we have not. In 1892, when the public became much alarmed at a possible visitation of cholera, I formed one of a consulting board to aid the Health Committee in its work. While acting in that capacity I was able to gain a fair insight into our system of sewerage. As in our commercial work we have been handicapped by our narrow streets, due to our former founders not grasping the possibilities of the future, so our sewerage is defective simply because the great future of Montreal was not realized, and at the outset no general plan, capable of definite extension, was made. Certain localities were drained as necessity arose. No provision was made for sewers being tapped, and to-day I am sure it will be news for many of you to know that we have drains which terminate in dead ends.

In 1892 the Consulting Board, of which I was a member, devoted a good deal of time to the question of sewerage, and obtained from Mr. St. George, the City Surveyor, a great deal of information. The members of this Board personally visited the Craig street main sewer, entered it at Victoria square, and travelled its entire extent, emerging at Delorimier avenue. The information we obtained was tabulated as follows: 1st. That the main sewers, required for the drainage of the city, had been built; intercepting sewers, to relieve the former, also existed, and the construction of others was being contemplated. 2nd. That in general the lateral sewers had been built without regard to the general system. 3rd. That those recently constructed had, however, been so built. 4th. That the numerous dead ends constituted a dangerous defect in the sewerage system. 5th. That there were seven or eight miles of streets without any sewers. 6th. That there were twenty-eight miles of streets with sewers two feet in diameter of which fully fifty percent were in bad condition. After gaining the above facts, we submitted a statement showing the size, shape and fall of all sewers, and the material of which they were built, and recommended:—1st. That the dead ends should, as rapidly as possible, be done away with by connecting them with other sewers. 2nd. To abolish, as rapidly as possible, any wooden or stone drains, and renew them, as well as all others defective from size, shape or fall, by modern sewers. 3rd. To build sewers in the seven or eight miles of streets where none ex-

Our System of Sewage.

Report of the Consulting Health Board.

isted. 4th. To flush freely all sewers at regular intervals, and in prolonged dry weather frequently as required. 5th. To ventilate all sewers at their highest point, and keep them open in winter; also to extend all private drains, by means of iron pipes, to the roof, so as to act as so many ventilators. 6th. That houses should not be allowed to be erected where there was no public drains or extension of the city water system. It was urged that the above suggestions might and should be carried out within five years.

How the Sewers
are Cared for.

From the City Surveyor we obtained the following as regards the management of the sewage system:—1st. Sewers are visited systematically once a year, and they are cleaned when necessary. It is considered that the flow of water through them is sufficient to keep them clean. 2nd. The principal cause of obstruction is brick and mortar which find their way into them. 3rd. The sewers discharge into the river at Delorimier avenue, at Fullum street, McGill and Point St. Charles. In winter the outlet at McGill street is closed, and the contents of the sewer at that point are carried to and discharged at the pumping station. The number of privy pits in the city at this moment is estimated to be 6,500, while some five years ago they numbered fully 8,518. You will see that the number has been greatly diminished, and I look forward to the time arriving before long when the number will reach a limit which may give us a reasonable hope for their speedy disappearance. We must, however, remember that till we have sewers and water in every street where there are buildings, privy pits must exist. Their number can be limited, however, by not allowing buildings to be erected where sewers and water have not yet been provided. The very great importance of a complete system of sewers for Montreal is one of the very urgent questions which, from a sanitary point of view, face us to-day. Without this, how can we expect our mortality to be much farther reduced? Its sewers are truly the bowels of a city, and serve to remove the filth that would otherwise poison the community.

House
Drainage.

In this connection let me say that sanitation is closely influenced by house drainage which, as all know, has improved very much within a very few years. I am afraid, however, that house drainage and plumbing does not receive, in houses being erected, or where alterations are being made, that close attention or inspection which it should. Let me add, I would not allow anything but iron pipes for house drains, and I deeply regret to see an effort being made for a modification of the by-law, which now makes their use imperative.

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LECTURE VI.—NOVEMBER 29TH, 1895.

THE PROTECTION OF LIFE AND PROPERTY.

BY ALDERMAN E. GOFF PENNY.

The subject upon which I am to speak to you to-night, would seem, at first thought, to be a most uninteresting one, but a little study will show that it is one of great importance. Every large city to-day has its own police laws and regulations, and though they differ somewhat in detail, yet they are based on the same principles the world over. The first mention I have been able to find of a constabulary system in Montreal was in 1663. On January 27th, 1663, at the request of Monsieur de Maisonneuve, 140 citizens of the Town of Ville Marie voluntarily offered to form the militia of the Holy family of Jesus, Mary and Joseph, and were enrolled in companies of seven men each, the whole forming twenty companies. These were all the men available at that time for protecting Ville Marie. Later, in 1667, de Maisonneuve organized a police force, at the head of which were five of the principal inhabitants; these acted as judges. The chief duties of this force were to guard against fire, and see that no one was out after nine o'clock at night. The laws at this time were mostly relating to taverns, and were very strict, so much so that only travellers could obtain liquor from them. Coming to the beginning of this century I shall quote from Alfred Sandham's "Sketches of Montreal Past and Present":—"During the earlier years of the history of our city, it was customary to appoint, at stated periods, two or more persons in each ward who should act as constables. These were generally taken from among merchants, tradesmen, and others whose well known character and acquirements fitted them for the position. Thus we find that in 1811 there were sixteen constables and five substitutes appointed. Of this number, four constables and three substitutes were for the city, three constables and one substitute for St. Lawrence suburbs, the same number for St. Joseph

The Police
Force of
Early Days.

The Montreal
Police Force,
from 1839 to
1865.

suburbs, and three constables each to Quebec and St. Antoine suburbs." These constables, so far as I have been able to learn, were appointed by the government, but were under the jurisdiction of the Court of Quarter Sessions, which, before the year 1840, corresponded with our present City Council. The laws were to a certain extent similar to ours of to-day, but not nearly so numerous. I have been fortunate enough to get a peep at one police regulation book previous to the present system. This is dated 1817, and was printed by James Lane, 29 St. Paul Street, the title being "A Book of Rules and Regulations of the Police for the City and Suburbs of Montreal." The government authorized the Court of Quarter Sessions to make these regulations to "more effectually provide for regulation of police in the City of Montreal." The first article refers to interments; the other regulations relate to markets, the beach, servants, and vagrants, etc. Coming now to what may be called the nucleus of our present force, I shall quote from "Bosworth's Hochelaga Depicta," published in 1839. "The 'police force was organized in consequence of an ordinance issued 'during the administration of the Earl of Durham, on the 28th of June, 1838. It consists of 102 privates, 4 mounted patrols, 6 sergeants, 6 corporals, under the command of 4 officers, viz.—Captain 'Alex. Comeau and Lieut. Worth for Division A, and Captain Brown and Lieut. W. Stuter for Division B. The superintendent is Mr. 'P. Leclerc. The day duty commences at 7 a.m., and ends at 6 p.m. The night duty commences at 6 p.m., and ends at 6 a.m. 'Every man is to be on duty three hours in winter and six hours 'in summer. The expense is to be borne by the Civil Home Government, and amounts to at least £6,000 per annum." The article goes on to say that "The jurisdiction of the police extends throughout the city, suburbs, harbor, and island of Montreal, together with 'the parishes of Laprairie, Longueuil, Boucherville, Varennes, Repentigny, Lachine, St. Vincent de Paul, St. Martin, and Isle Perrot." This was quite a district for 102 men to patrol, and I am quite sure that the men on the force of our day are very glad this has since been modified. In the year 1840 the legislature did away with the Quarter Session arrangement, and granted a charter to the City of Montreal in virtue of which the City Council was formed. On September 14th of that year the first Police Committee (which was also the health) was named, and composed of Aldermen DeBleury, chairman; Aldermen Ferrier and Bruneau, and Councillors Guy and Molson. At the same meeting the committee was authorized to draw up by-laws. The first Police Committee book on record is dated 1842; the first Police Order book is 1846; the first order is signed T. Wiley, chief, and refers to a man being left on duty seven

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hours without relief. Then, as now, the city was divided into three districts. From 1838 to 1895 the police force has been established by virtue of charters, granted to the city from time to time by the legislature, by which the City Council has been given power to create a police force, and make the necessary rules and regulations concerning it. Thus, the City Council is now acting under its present charter obtained in 1889, but the by-laws of the Council governing the force date from 1865. The authority given by the charter reads as follows:—"The City Council of Montreal is hereby authorized to make laws for the good government, peace, welfare, etc., of the city, and the preservation of order therein; to provide for the governing, regulating, arming, clothing, lodging, and paying of the men and officers of the constabulary force of the city, and for regulating the residence, rank, inspection, and distribution of the force." On May 10th, 1865, the City Council enacted the following by-law:—"A Police Department is hereby established for the City of Montreal; these shall be armed at the discretion of the Police Committee with such arms as they may determine." It goes on to say that the Council may increase or diminish the force as they deem expedient, without the necessity of a by-law. Taking now the Police Committee; it is composed of seven members of the City Council and elected by it. The Committee gets its authority from the same by-law (No. 5) as above, under another section, which states that "The Committee is hereby authorized and required to make such rules and regulations for the government and control of the police force as they may deem expedient." We have thus seen that the charter has given the City Council the necessary authority to arm and equip the police and remunerate them. This power the Council has passed on to the Committee, but reserves to itself the right to fix the pay of each officer and man. To-day the force is made up as follows:—1 superintendent, 3 inspectors, 14 captains, 29 lieutenants, 325 constables, 1 chief detective, 7 detectives and 8 variously employed; a total of 388 all told, belonging to the active force to guard the city. Of these one third do duty during the day and two-thirds at night. The superintendent and inspectors are appointed by the Council; all the other officers by the Committee, and the constables by the superintendent himself. The superintendent is responsible for the good government and efficiency of the force. He may, however, issue such orders as he considers right, so long as they are not inconsistent with the laws and by-laws of the city. He has also the right to dismiss any officer whom he has had the power to appoint, but such officer has right to appeal to the Committee, whose judgment is final. The superintendent also

The Montreal
Police Force,
1895.

The Police-
Committee.

Composition
of the Present
Force,
Duties of the
Superintendent
etc.

A Constable's
Duties.

receives orders from the Council from time to time, to issue petty licenses, such as for dogs, vehicles, peddlers, etc. Each of the three divisions of the city is under the supervision of one inspector, who is to see to the conduct of the portion of the force in his division; he is also responsible for the condition and order of the stations under his control. There are sixteen police stations in the city, to each of which is appointed one captain, one or two lieutenants, and as many men as are necessary—according to locality. The captains, with their families, reside at the stations, and 't is their duty to see that the stations are kept clean, and that the relief go out, that the men under them do their proper duty, and that reports are properly entered, and also to report every morning to the superintendent. Coming now to the constables, I will not go into all the details of the duties of a policeman, for, as the writer of the article on this subject in Chambers's Encyclopedia says: "The duties of a policeman are exceedingly multifarious." The first duty of a policeman is obedience to his superiors, then courtesy to all men. One man's beat is supposed to be one square mile, except in the crowded thoroughfares, where more men are on duty and the beats shorter. While on his beat as constable he has to look after the obstreperous small boy; he has to keep in order the boys and girls, men and women of all classes and ages. As crimes are committed by people from the lowest to the highest circles of society, our policeman has an opportunity of seeing many phases of life, some ludicrous, but for the most part the saddest. He will in his time arrest from the meanest sneak-thief to the millionaire bond-thief; from the lowest drunkard to the debauched roue of good family; he has to see that no laws or regulations are infringed; that citizens' doors are not open at night; watch suspicious characters (even cabby's person is not sacred); he has to be out at all hours of the day and night, in fine weather or wet, in warm or cold days; a policeman must keep his eyes and ears open, to be always on the alert, and act, often on the spur of the moment without hesitation, and on his own judgment. A constable to be eligible for the the force must speak and write both languages, be up to the regulation measurements and pass a medical examination. In the year 1893 a handbook, called the Police Manual, for the guidance of the Montreal Police Force, was compiled by Messrs. Lanctot and Dandurand, with the concurrence of Mr. Ethier, City Attorney, and Superintendent Hughes. This book was, I believe, accepted by the Police Committee. It gives in detail all the officers of the force; describes minutely the duties of each—as also of the constables—and as a help to these latter to perform their duty efficiently, various orders and by-laws

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concerning the city are printed in full, and I believe each man is given a copy on his entering the force.

One of the latest additions to the police system is the patrol. In ^{The Patrol System.} connection with this there are six waggons. These are placed at different stations, so as to divide the city among them as evenly as possible. In conjunction with the waggons we have 100 patrol boxes scattered all over the city; you all know what the outside looks like; if you would like to see the inside, I have no doubt some obliging policeman might lock you in. Inside you would find a telephone, also a dial with a handle to turn to fire, ambulance or riot. Every constable and officer is supplied with a key to these boxes; and in an emergency can lock a prisoner in until the waggon comes; or he can telephone for assistance in case of need, or give an alarm of fire. A constable on beat is obliged to stop at these boxes from time to time and report himself to his station. The cost of placing this patrol system was \$30,000—\$24,000 for the boxes and instruments in the stations, the balance for horses, waggons, etc. The city pays the Bell Telephone Company \$2,000 per annum rental for the maintenance of the phones. I will proceed now to ^{The Detective Department.} the Detective Department, to describe which I cannot do better than to quote from the Manual: "Detectives are under the control of a chief, subject to the superintendent, to whom he shall be responsible for the efficient discharge of his own duties and of those under him. Detectives rank over constables. Considerable latitude must naturally be allowed members of this department in the performance of their duties, but they are particularly cautioned against practices calculated to destroy esteem and respect." Detectives really have more responsibility than the police, and as a rule have to take more risk as to their lives. The Chief Detective receives \$1,000, and his subordinates \$900 per annum. These men are called upon to hunt down the worst criminals, and to go into the lowest dens and places imaginable, and to trace most intricate frauds; they therefore should be well remunerated. We will now look into the cost per ^{Annual Cost of the Police Department.} annum of our Police Department, and for this purpose I will take the estimate for the coming year, lately furnished by the superintendent. He asks for the present force and staff, including salaries, uniforms, maintenance of stations, repairs—in fact, everything—\$307,500. Now, this per annum would mean about \$800 per man including all officers. The following estimate submitted by the superintendent recently to the City Treasurer gives a fair idea of the yearly requirements of the force :—

Salaries..	\$245,000
Uniforms..	20,000
Horse-keep, exchange of horses, repairs to vehicles	4,000
Contingencies for 16 stations..	8,000
Light and fuel for ditto..	6,000
Medical assistance..	1,200
Provisions for prisoners..	1,600
Rent of stations, taxes, etc..	2,000
Telephones..	1,200
Numbers for licenses..	3,000
Repairs and furnishing..	6,000
Rent to Bell Telephone Company for patrol system	2,000
Allowance to officers for horse keep, rent, etc.. . .	1,500
Total..	307,500

The Annual
Police Report.

The Superintendent's salary is \$3,500 a year; the inspectors, \$1,200; the captains, \$800-\$900 with house; the lieutenants, \$700-\$750, and the constables, \$400-\$600. Each man is supplied with an overcoat, fur cap, blouse, tunic, summer cap and helmet, trousers and boots, mitts and gloves. This applies only to the police force; the detectives receive only their pay and a badge. During the year there were 7,698 arrests made, and these include all sorts and conditions of men from the scavenger to the gentleman. By these 30 nationalities were represented, their ages ranging from 10 to 90 years. The greater number were arrested for drunkenness. The Detective Bureau recovered property to the value of \$19,426. The Patrol Report was that there were 191,454 reports from constables on beats, 4,689 alarms responded to, 3,805 arrests made, and 738 fires attended. From the foregoing you will see that our officers have not been idle. Besides the civic police we have the Provincial Force. This body is limited to one chief and six men, the chief being paid \$1,200 and the men \$600. Their principal duty is to see to the proper enforcement of the license laws, and prevent any infraction of them.

The Provincial
Police.

There now only remains for me to tell you how prisoners are arrested and punished. An arrest can be made either with or without a warrant. With a warrant, the constable must ascertain that it is signed by the justice issuing it, and it is directed to all or any constables in the territorial division within the jurisdiction of the justice issuing; he must also see that it describes the accused and names the offence. Without a warrant, a constable is authorized to arrest any person attempting to commit, in his presence, a felony or misdemeanor. The usual mode of effecting an arrest is by self

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ing the prisoner by the arm, and saying : " You are my prisoner." If a constable finds himself being overcome he may use weapons. When a prisoner is first arrested he is taken to the nearest station, afterwards to the Central Station, from which he is brought before the Recorder to be, by him, disposed of according to law. ^{The Recorder's Court.} The Recorder's Court is established by the City Charter. The Recorder himself is appointed by the Lieutenant-Governor ; he has a salary of \$3,500 a year. His court is for the purpose of trying all cases where money is owing to the city, and petty offences and misdemeanors. Whenever the Recorder orders any person to be imprisoned, he or she is sent to the common gaol. Appeals may be made from the Recorder's Court. For every prisoner sent to gaol, belonging to the city, the city has to pay for his maintenance ; this has averaged between \$7,000 and \$8,000 per annum. Lately, however, the Quebec Government has been trying to make Montreal pay for all prisoners no matter where they come from. This the city has been fighting, as the gaol appertains to the Provincial Government. Now, Sir, I think I have told you all I know on the subject, and hope I have not tired my hearers, whom I thank for their patience.

LECTURE VII.—DECEMBER 13TH, 1895.

MONTREAL'S WATER SUPPLY AND ITS CONTROL.

BY JOHN KENNEDY, ESQ., Chief Engineer Port of Montreal.

Early Water
Works under
Private
Ownership.

At the beginning of the present century, Montreal was a town of only about 9,000 inhabitants, who lived mainly within the old fortifications, or in other words, within the area bounded by the sites of McGill Street, Fortification Lane, Berri Street, and the St. Lawrence. St. Paul Street was then considered well up town, and Notre Dame Street and vicinity were called Upper Town. The only means provided by the municipality for the supply of water, consisted of public pumps at Place d'Armes, the Market Place (now Place Royale), Notre Dame Street near the Court House, St. Jean Baptiste near St. Paul Street, and possibly a few other points. For the rest, the citizens supplied themselves with water from private wells and cisterns, and by water carts from the St. Lawrence and the creeks, the principal of which was the Petite Riviere, which ran where Craig Street now is. The need of water works, however, was already recognized, and on April 8th, 1801, an act was passed incorporating Joseph Frobisher (one of the founders of the North-West Trading Co., and builder of Beaver Hall) and his associates, under the title of the Company of Proprietors of the Montreal Water Works, with a capital of £8,000, and power to increase to £12,000 or \$48,000 in all, with exclusive rights for 50 years. A gravitation system was determined upon, and construction commenced at once. Water was obtained from the pond in the rear of the present Cote des neiges College, at Cote des Neiges Village, and was brought to the city through wooden pipes laid round the southern slope of the Mountain via Monklands (now Ville Marie) and the Cote St. Antoine Road, to two reservoirs which were placed one on the corner of Guy and Dorchester Streets, and the other on Notre Dame Street, just west of Dalhousie Square. The supply of water proved so scanty, from deficiency of the springs, and so precarious from frequent burstings of the pipes, that both the works and the enter-

prise became failures. In 1816 the works and unexpired franchise of 35 years were offered for sale; and in 1819 they were purchased by a new company, under the management of Mr. Thos. Porteous, for £5,000 (\$20,000). The new company abandoned the gravitation supply from the mountain springs, and substituted a steam pumping system, with supply from the St. Lawrence. Four-inch iron pipes were substituted for the wooden ones, and wooden cisterns were placed on Notre Dame Street, east of Bonsecours Street. The wooden cisterns failed, and were replaced by others in 1827, which were lined with lead. They were of 240,000 gallons capacity, and had an elevation of 97 feet above the river. The pumping engine was placed on the west corner of Water and Fripone Streets, and the water was drawn from the river side opposite. The amount expended by Mr. Porteous was about £40,000 or \$160,000. The four-inch pipes proved insufficient, and in consequence of this, and the death of Mr. Porteous, whose enterprise had sustained the undertaking, it again fell into disrepute. After being advertised for sale for two years, the works were purchased in 1832 for £15,000 (\$60,000) by Mr. M. J. Hayes, who formed a third company. This company laid some pipes of 10 inches diameter, renewed the pumping engine and added others. In 1843 there were two pumping engines; one, rated at 40,000 gallons capacity per hour, was used both for pumping and grinding, a grist mill being attached to the works; another, rated at 53,000 gallons capacity per hour, was used for pumping only. This would give a combined pumping capacity of $2\frac{3}{4}$ million gallons per twenty-four hours; but, ten years later, and after a third engine had been added, or possibly substituted for one of them, the whole reliable capacity was stated as only one million gallons. By February 1st, 1843, the company had laid 14 miles of pipe; had established three public water taps for the sale of water to water carters, and had 16 fire hydrants of their own, as distinguished from other hydrants owned by the city. The expenditure by Mr. Hayes's company was about £10,000 (\$40,000).

In January, 1843, the propriety of the city becoming owner of the water works, was first mooted in the City Council. After treating for two years, the city bought out the Haynes' company in April 1845, for £50,000 (\$200,000). In the ensuing summer the City Corporation, in order to obtain purer water, extended the intake pipes of the pumps to the outer end of the Victoria Pier, the first part of which was then being built. In 1847 the Corporation offered a premium for the best plan of pumping water from the St. Lawrence to reservoirs on the mountain, by means of water power from the newly enlarged Lachine Canal; but instead of anything being accomplished in carrying out that scheme, the steam pumping

Civic ownership
of the Montreal
Water Works.

works were strengthened by the addition of another engine. The water works were otherwise enlarged about the same time. In 1849 a reservoir was built in Cote a' Barron, where St. Louis Square now is, with a capacity of about 3,000,000 Imperial gallons, at 130 feet elevation above the river. With a view to the prevention of conflagrations, water pipes were soon afterwards laid in Griffintown and other parts of the city not hitherto supplied, and the number of fire hydrants in the city was increased to 100. The water works were, however, still quite inadequate to the wants of the city; and worse still, the water supplied was unwholesome. The pumping capacity was only about 1,000,000 gallons per day; the reservoir was too low; the pipes were too small, and the hydrants too few to prevent great fires.

Design and
construction of
our present
system.

On May 12th, 1852, on motion of Ald. Atwater and Ald. Valois, the City Council voted £250 (\$1,000) for a survey, plans and estimate for introducing water from Lower Lachine or elsewhere. Mr. Thos. C. Keefer, C.E., was commissioned by the water works to prepare plans and estimates for the supply of 5,000,000 gallons per day to be taken from Lower Lachine. On the 25th of October following, Mr. Keefer submitted an able report, discussing various feasible schemes for the new water works, and recommending the one which was afterwards constructed, viz.:—The water power pumping system in which the water for the city is taken from the St. Lawrence, above the Lachine Rapids, and pumped to the city under the pressure of the McTavish reservoir, by power obtained through utilizing the fall of the rapids. The estimated cost was £150,000 or \$600,000. This was looked upon as a large sum, for in those days the city did not lightly borrow and spend millions. Public opinion was, however, strongly in favor of an abundant supply of pure water, and that with the least possible delay. The project was therefore adopted. Mr. Keefer was forthwith instructed to prepare plans for vigorous construction of the works, and the legislative authority was obtained for borrowing the necessary money. On the 20th of May, 1853, ground was broken for the construction of an aqueduct; contracts for the pumping machinery and pipes were made soon after in Britain, and by the end of the year great progress had been made in the construction of all the heavier parts of the works. The new waterworks were finished in the summer of 1856. On the 10th of October they were publicly tested as to their capability for throwing fire streams, and gave great satisfaction. Hose was attached to the hydrants in various parts of the city, and streams thrown over the highest commercial buildings of the time. At Notre Dame Street Church, Place d'Armes, these streams measured 110 feet in height. The distribut-

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ing pipes of the old works were forthwith re-arranged and connected with the new mains, and the old pumping machinery and reservoir were superseded by the new.

The pumping machinery of 1857 had a capacity of 6,000,000 gallons a day. The pumps forced the water through one 24-inch pipe to the McTavish reservoir, which then contained 12,500,000 gallons, and was 204 feet above the river. During the succeeding thirty-nine years, new machinery has been from time to time added, and old demolished, leaving the present pumping plant as follows:—

WATER POWER PUMPS.

	Capacity per 24 hours, Imp. gallons.
Three pumps of 1856 (nearly worn out) driven by the turbine of 1874.	3,000,000
Turbine and pair of pumps of 1865.	4,000,000
Turbine and pair of pumps of 1881.	3,000,000
Turbine and pair of pumps of 1895.	5,000,000
Total water power pumping capacity.	15,000,000

STEAM PUMPS.

Worthington low duty engine of 1875.	8,000,000
Worthington high duty engine of 1886.	11,000,000
Worthington high duty engine of 1894.	9,000,000
Total steam pumping capacity.	28,000,000
Grand total water and steam capacity.	43,000,000

The present daily consumption of the city varies between 14,000,000 gallons and 18,000,000 gallons, and averages about 16,000,000 gallons per day for the year round. Our water power machinery is thus deficient at its best in summer, by about 3,000,000 gallons per day, while at the worst, in winter, it is well nigh useless because of the action of the ice in the little old aqueduct. It therefore follows that one of the two high duty steam engines must always be in use; much of the time both must be in use, leaving only the old low duty engine in reserve. The cost of steam pumping in 1894 was about \$43,500, and this year it will probably be over \$45,000.

Mr. Thos. C. Keefer and Mr. E. Vanier, civil engineers, were called upon, two years ago, to deal with the question of an increase of the water power, and, in a comprehensive report, dated March, 1894, they agreed with former eminent engineers in advising the completion of the new aqueduct, and with it the increase of the water power machinery and improvement of the tail race. The

capacity of the enlarged water power thus recommended would be 45,000,000 gallons per day in the winter, and 50,000,000 to 60,000,000 gallons in the summer. The estimated cost of the entire work incident to the enlargement, is \$1,500,000, and it was calculated that the saving in pumping expenses would balance the interest on the outlay when the city's consumption reaches 25,000,000 gallons per day.

Piping.

The water from the pumps is conveyed to the city and distributed throughout the streets by 216 miles of main and distributing pipes. From these it is conveyed to the consumers' houses, factories and other premises by 55,850 service pipes, these being the respective figures for the end of 1894. The main and distributing pipes are practically all of cast iron, and four to thirty inches in diameter. The services are practically all of lead, and mostly $\frac{1}{2}$ and $\frac{3}{4}$ inch diameter. In 1856, when the new works were opened, there was only one pumping main. It was of 24 inches diameter, and extended from the pumps to the reservoir via Atwater Avenue, St. Catherine Street and McGill College Avenue. It had an extension of the same size to Phillips Square, where it branched into smaller pipes. In 1867 the 24-inch main was doubled. In 1875, a third main of 30 inches diameter was laid from the pumps through Atwater Avenue and Sherbrooke Street to Papineau Road, in order to carry a large body of water at full pressure along the high ground, and thus feed the pipes running to the lower levels. In 1877 and 1885, the superintendent, Mr. Lesage, drew attention to the inability of such small pipes to supply either sufficient water or sufficient pressure for fires in high modern buildings. The insurance companies also took the matter up and agitated that and other questions relating to fire protection, with such effect, that a general system of arterial mains was devised, and speedily laid down, for feeding the hydrants direct where most needed, and for feeding the small pipes at short intervals. Eight-inch diameter was adopted as the least size for distribution pipes to be subsequently laid. A systematic changing of the hydrants in the more important districts was undertaken, the smaller old hydrants being replaced by large ones with four nozzles for ordinary hose, and another for feeding steam fire engines. All the pipes and hydrants in public streets are the property of the city, and are laid free of charge to consumers. House services within the street line are also the property of the city, and are laid free of charge to consumers. All extensions of the service pipes upon private property must be made by the owners.

Main Reservoir.

The reservoir of 1858, now called the McTavish or Low Level reservoir, was originally of oblong shape with semi-circular ends, and it was so placed in the mountain slope that the surface of the

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rock was about level with the water surface on one side, and with its bottom on the other. The natural rock was used as a wall on the upper side, but on the lower side the water was and is still retained by a masonry wall, banked by an embankment, both wall and bank being formed of rock from the excavation. The reservoir was divided transversely into two equal parts by a masonry wall, and together they contained $13\frac{1}{2}$ million gallons. The surface elevation when full, is 204 feet above the harbor. The cost was about \$200,000. Upon the recommendation of Mr. Lesage, an extensive enlargement was made between 1874 and 1877, at a cost of \$398,243, by widening into the rock on the upper side, the division wall being extended through the enlargement. The reservoir remains as thus enlarged. Its capacity is 35,000,000 gallons, and its entire cost must be about \$600,000. Under the gatehouse, which stands on the reservoir bank, there is a well or distributing chamber. Into the bottom of this well the main pipes from the pumps and city are led, and opposite to them is a separate passage to each division of the reservoir. The pipes and passages are all controlled by gates, and by their means the water is turned off or on either division, or either main pipe at will. The well itself may also be used as a stand pipe for the pumping machinery in case both divisions have to be emptied at once. The water from the pumps does not go first to the reservoir and thence to the city, as popularly supposed. The reservoir is merely connected with the pumping and city mains by branch mains, and it acts by taking the surplus water when the pumps are delivering faster than the city consumes, and by supplying the deficiency when the pumps are furnishing less than it consumes. The 35,000,000 gallons contained by the reservoir, when full, could supply the city for barely two days.

Above the level of Sherbrooke, at Mountain, and off St. Denis Street, at Rachel, there is a large area of the city which is too high ^{High Level System.} to be efficiently served by the McTavish reservoir, even for domestic purposes. To supply this there is the High Level System, a complete little water works, drawing its water from the main works, but having its own pumping station, reservoir and pipeage. Its pumping station is at the McTavish reservoir, and it is equipped with a high duty steam pump of 3,000,000 gallons capacity per day, and also with an old low duty pump of half-a-million gallons capacity, which is kept only for emergent use. The pumps draw their water from the McTavish reservoir, and discharge into a 12-inch main, which connects with the high level distribution pipes and reservoir. This reservoir is 212 feet higher than the McTavish reservoir, or 413 feet above the harbor, and it is situated on the

mountain side, just above the McTavish monument, in the line of Peel Street. Its capacity is 1,750,000 gallons. The high and low level distribution pipes overlap each other throughout a considerable area,, which is determined by the different pressures required for domestic and fire service.

Management
of the Water
Department.

The general management of the water works is under the control of the Water Committee, which is appointed yearly by the City Council, and consists of seven of its members. The monies for working and maintenance expenses are granted by the City Council, usually in one sum for a year. Such monies come out of the revenue of the works, or in other words, the water rates, and are paid out by the City Treasurer on warrants drawn by the Water Committee, and charged up in the water works account under the head of "Administration." Monies for new works, such as additions to the pipeage, pumping plant, reservoirs and aqueduct, are also voted by the Council, at intervals, and more or less specifically as to items, but for such purposes the monies are taken from the proceeds of city loans for water works purposes, and are charged up in the water works account under the head of "Loans." The income of the water works is almost wholly derived from the water rates paid by consumers. These are collected by the Finance Department by means of a special staff of clerks and collectors, whose salaries are charged up to the Finance Department and not to the water works. The immediate management of the works, and of the officers and men for working them, is in the hands of a superintendent, who is an engineer holding his appointment from the City Council, but acting in all ordinary matters under the direction of the Water Committee. The entire official and working staff averages about 350, and is made up as follows:—The superintendent, assistant superintendent, 3 draftsmen and 5 clerks in superintendent's office, 1 guardian and 2 assistants on the aqueduct, 1 chief engineer, 4 assistant engineers, 5 ollers, 9 stokers and others at the low level pumping station; 1 engineer, 1 assistant and 1 stoker at the high level engine house and McTavish reservoir, 1 general foreman over city pipeage works, 1 foreman in repair shop, Lagauchetiere Street, 10 turncocks, 4 hydrant inspectors in summer, and about 25 in winter; 6 house service inspectors, 250 sub-foremen, mechanics and laborers. Besides this strictly waterworks staff, there are about 18 clerks and 20 collectors in the water works branch of the City Treasurer's staff.

Water Rates.

Water is furnished to citizens under a tariff of charges established by the City Council. By far the greater part is furnished for domestic use, and for this the annual rate is $7\frac{1}{2}$ per cent. of the rental, with certain additional charges for baths, etc. For stores

and offices the rates are \$4 upon a rental of \$50, \$5 for \$75, \$6 for \$100, and \$1 upon every \$25 additional rental. In all these cases the charge is against the tenant. Payment is compulsory, whether water be taken or not. No person is allowed to draw water for himself or others from the river, nor to buy it from the works by meter for ordinary domestic use. For engines, factories, elevators and other industrial uses, it is supplied through meters, and charged under a sliding scale of rates from 30c per 1,000 imperial gallons for less than 1,000 gallons per day, to 15c per 1,000 gallons for 9,000 gallons or over per day. For building purposes, garden hose and sundry other temporary or annual wants, water is supplied at specially prescribed rates. The tariff charges include all the obligations of individual citizens arising from the water works. There is no charge for hydrants, and nothing is charged under the guise of general tax for interest, sinking fund or the like. St. Denis Ward alone is excepted from the general tariff, it being supplied with water through a company under a contract made before its annexation to Montreal.

(The following extract from Dr. F. W. Campbell's lecture is inserted here for the convenience of the reader.)

The water supply of a city is an important factor in its sanitation. I can well remember the time when the great part of the city was supplied by water carts. At that time the city wharf did not extend below the Long Wharf, opposite the Bonsecours Church. At that spot, and about where the abutment of the Victoria Bridge is now, the water carrier backed his cart into the water and filled his hogshead by means of pails. He then retailed it at three pails for a penny, and as everyone kept a water barrel, the tally was made on some convenient spot. Few house water-barrels had a cover; filters were uncommon; ice, as delivered at our doors to-day and for past years, was only known to the wealthy. I well remember the move to establish our present works. It was not sanitation which drove the citizens of Montreal to decide to build them; it was protection from fire, for, about 1852, a conflagration starting on St. Lawrence Main street, near St. Catherine, swept the city as far as the gaol, destroying over 1,000 houses, and rendering homeless 10,000 persons.

Upon the whole, our water may be considered a good drinking water, yet it is capable of improvement. This can be done, first by sedimentation, and second by filtration. These processes which are, in the main, mechanical, are particularly needed where water is taken from running streams, for then generally more or less of floating material is carried with it. Much of this is of so coarse a character as to be intercepted by wire screens, but a

Our Water
Supply, from a
Health Point
of View.

How our
Drinking Water
might be
Improved.

Sedimentation
and Filtration.

considerable amount is so finely divided as to require more elaborate arrangements for its removal. Sedimentation :—Much of the matter which a running stream bears along in suspension, is of higher sp. gr. than the water itself. If the water is allowed to stand quietly in basins or reservoirs, the greater part of the suspended particles will subside. In many modern works the water of a stream is allowed to stand in settling basins for a few hours or days. Hamburg on the Elbe, and St. Louis on the Mississippi, submit the water which they use to no other treatment. As a means of purification such a process, as a rule, is utterly inadequate. Sedimentation alone is unsatisfactory; still it is of great value, and often is practically indispensable as a preliminary to successful filtration. Filtration :—By properly conducted process of filtration it is possible to effect thorough clarification. Filtration of water on a large scale has long been carried out in England and on the Continent. But on this Continent, so far, little has been done in this direction. No filtering material has proved practically available on a large scale except sand. Filter beds, as usually constructed, are water-tight basins, ten or more feet in depth, the sides built of masonry, and the bottom puddled or made of concrete, or paved with brick and cemented. The following figures show the size of the filter beds at Poughkeepsie, N. Y.: They are two in number, each 200x73½ ft.; depth, 12 ft. The filtering area of each is therefore 14,700 sq. ft. The six feet of filtering material, beginning at the top of the bed, are disposed as follows :—24 inches of sand, 6 inches of ¼-inch gravel, 6 inches of ½-inch gravel, 6 inches of 1-inch gravel, 6 inches of 2-inch broken stone, and 24 inches of 4 to 8-inch broken stone.

LECTURE VIII.—JANUARY 10TH, 1896.

PROTECTION AGAINST FIRE, AND THE LIGHTING OF OUR CITY.

BY ALD. A. A. STEVENSON, Chairman Civic Fire Committee.

I begin by mentioning that Fire Brigades, as they exist to-day, are of rather recent growth. In the olden time, a couple of thousand years ago, there were, no doubt, bands of men organized for the purpose of extinguishing fires, but they have passed away, and it is most difficult to trace their existence. About two thousand years ago, there were a number of such bands in Europe, but they have long since passed away, and have been replaced by others. It was in 1841 that the following companies were organized in this city:—
“Montreal,” “Neptune,” “Queen,” “Protector,” “Hero,” and “Union.” These companies had manual engines, worked by some 36 or 40 men. The only means they had of getting the engines to a fire was by procuring a horse from some cab-driver, and hitching it into the shafts attached to the engine. To the engine there was attached about 300 feet of hose. There was also a reserve hose reel. There were two hook and ladder companies at that time. The men were paid one dollar a fire for a while, afterwards their remuneration was changed to twenty-four dollars a year, and still later to thirty-two dollars. For a long time these men were furnished with a very slim uniform—a canvas coat and a fireman’s belt. Even this was discontinued later on. Only half a century ago these companies were in existence. Each company tried to excel in getting to a fire first, for the simple reason that the corporation paid \$20 to the company which threw the first stream of water on the fire. Many of those who delivered water to the city kept their puncheons filled all night and their horses harnessed, in case a fire should occur, as \$5 was paid for the first puncheon of water that arrived at a fire. The alarm bell was placed in Christ Church Cathedral, and there was an apparatus that wound up and

Our Early
Fire Brigade.

kept the bell going. Afterwards the old French tower was used for that purpose, and when a fire occurred one of the men ran to the beagle of the parish church, and the old man in charge would climb up the tower and hang out a pole with a tin lantern on the end, in which was a lighted candle. The pole was hung in whatever direction the fire was. The firemen were never allowed to ring the bell until the pole had been hung out. In those days there were very few, if any buildings saved; the firemen turned their attention more to the saving of property. Later, this method of alarming the citizens was changed, and the bell was rung after the engines had left. In 1863, the nucleus of a paid department was formed, consisting of a chief, superintendent, and twenty-four men. The guardian (what we now call captain) was paid \$365 a year, the assistant, \$275 a year, and the drivers \$240. They furnished their own uniform. In addition to their regular duties, in connection with the fire department, the permanent men used to water the streets in summer, cart water for the city, etc. Thus these men in reality earned their wages quite as much as any of the community. In 1863, the Fire Alarm Telegraph came into operation.

First Paid
Department.

Present Force
and its
Disposition.

Constant additions have been made to the present force, until now it numbers 190 all told. There is a chief with \$3,000 per annum, four assistant chiefs, each in charge of a district, with a salary of \$1,200 a year, exactly the same amount of money as that paid the ordinary fireman in New York City. Then we have a secretary for the office of the Committee, whose salary is \$700. We have 17 fire stations in Montreal, controlled by 17 captains. The captains get \$700 a year and free dwelling. We also have 9 engineers whose salary is \$700; 8 foremen of ladders with a salary of \$650; 3 foremen of salvage waggons with a salary of \$800; 3 foremen of chemical engines, with a salary of \$800; one foreman of water-tower, with a salary of \$650; 99 first-class firemen, with a salary of \$600, and 41 second-class firemen, whose salary is \$500. I do not mean to say that a great many of the second-class firemen are not entitled to first-class pay, but the funds will not permit, and their salary has to be regulated accordingly. We have two doctors who attend at fires in order to render the men every assistance. When men are overcome by smoke, as they sometimes are, the doctors attend to them, and also attend the men who get hurt in any way, and see that they are taken proper care of and taken to their home or a hospital. The apparatus now in use are:—15 reels, each drawn by one horse and carrying 500 feet of hose; 2 spare reels carrying 500 feet of hose. Those are placed in Nos. 13 and 14 Stations, and are used in case a fire breaks out while the other reels are away. We have 2 reels carrying 500 feet of hose, and these barrels can either

Apparatus
now in use.

be used singly or doubly ; these are drawn by two horses. We have 4 extension ladders each drawn by four horses ; 5 Bangour ladders each drawn by two horses, and 3 single ladders, each drawn by one horse ; also 9 steam fire engines,, 4 with three horses and 5 with two horses. We have also 2 salvage waggons, drawn by two horses each, and carrying fifty covers which are used for spreading over goods to protect them from water. We have three chemical engines, drawn by two horses, each having a capacity of 100 gallons. The chemical compound is 28 pounds carbonate of soda and $13\frac{1}{2}$ pounds of sulphuric acid, the soda mixed with 100 gallons of water. When it is needed for use they have a method of turning a tap which breaks a glass and allows the acid to mix with the soda ; in this way they soon get up a great pressure. The insurance companies place great reliance upon these engines, as they claim that the damage is nearly always greater by water than by fire. There have been great improvements in nozzles of late, whereby it is now possible for a man to regulate the stream of water as he likes ; this may, therefore, before very long, lead to the discontinuance of the chemical engines. Then we have a water-tower drawn by four horses. It is a piece of apparatus which has not been used very often, and is not intended to be used very often. It throws a very great quantity of water, and is used for drenching out fires. We had hard work to get this tower, as the people seemed to think it would not be wanted in Montreal. We have 106 horses on duty. There are nearly always five or six horses in the hospital from injuries or sickness. We have to rely a great deal upon hose ; we do not rely upon engines as much as they do in other cities. We have a good pressure of water from the reservoir. The pressure at the hydrant opposite the Windsor Hotel is 123 pounds, at the C. P. R., about 170 or 180 pounds, and at the hydrant opposite the convent near the G. T. R., 186 pounds. We get the best hose obtainable ; we have 28,000 feet of different brands. The hydrants and water mains are in charge of the Water Department. There are about 2,000 hydrants in the City of Montreal. They are kept clear of frost by three portable boilers. Last year the Water Department found 180 hydrants frozen in one day ; this year the most has been 95, but they very often find 40, 50 or 60 in a day. They are thawed out by the portable boilers. The Fire Commissioners are appointed by the Provincial Statute ; are named by the Government, and the clerk is appointed by the city. These Commissioners are expected to inquire into the cause of every fire, at least all those where there is any doubt as to the origin. One-third of this expense is paid by the city, and two-thirds by the insurance company. The Fire Committee is composed of seven members of the

Hydrants and
Water Mains.

The Fire
Commissioners
and Fire
Committee.

Boiler
Inspection.

Council. This department has four sub-departments under its jurisdiction: the Fire Department proper, the Fire Alarm Telegraph Department, the Boiler Inspection and the Building Inspection. The by-law respecting steam boilers was passed in 1877. Dr. Champagne has been Boiler Inspector since 1879. He has to inspect all boilers in operation in the city. There are 793 boilers in the city. They are not all in use, but every boiler in operation must be inspected every year. The inspection fee is \$5. The Boiler Inspector regulates the capacity of each boiler. If it is 100 pounds he wants a boiler to carry, he locks the valve there and tests the boiler to 150 pounds, 50 percent more than he allows the boiler to be used. This is with new boilers. With second-hand boilers he adopts Lloyds' rules, which require all boilers to be tested to double the capacity allowed. Dr. Champagne has been Boiler Inspector for 17 years and never met with an explosion. He has also to examine applicants for certificates as engineers.

The Building
Inspector's
Duty.

The Building Inspector issues all permits for buildings. He inspects all buildings in which any material changes are being made, not including, however, the insertion of new windows, doors, etc. He takes notes of places where fire escapes are necessary, to see that they are useful in case of fire. He also has charge of all the chimney sweeps. He attends to all complaints and claims. The claims last year amounted to about \$50,000. The number of buildings erected from 1864 to 1894 was 17,511.

Fire Alarm
Telegraph.

The fire alarm telegraph came into use in January, 1863. The contractors had to put a gong in every station, and striking apparatus for bells in four churches. The four bells were in Parish Church (the French Church) in Christ Church Cathedral, St. Georges Church, and St. James Church, corner of St. Denis and St. Catharine. We have now 150 miles of wire. The central fire alarm is at the City Hall. Men are on duty day and night, and people can visit the tower at any time during the day. The battery is located there which produces the current for the whole city. The apparatus is always kept in order, being tested every twenty minutes, which makes it impossible for anything to go wrong and continue so for any length of time; in fact, they now have apparatus which, in case anything occurs to throw it out of order, reports itself. Mr.

Superintendent
and Staff of
Fire Alarm
Telegraph.

Badger, the superintendent, has three assistants, a line man to look after the wires outside, and the latter man has four assistants; that is to say, there are nine men in all employed in taking care of the fire alarm telegraph. Formerly the boxes were locked and the keys given to parties living close at hand. We have adopted a different system lately, and have abandoned the system of placing the keys

in houses. We now have a little glass box fastened to the pole on which is the alarm box. The key is enclosed in this little glass box, and in case of fire is taken out, the box unlocked, and the alarm sounded. There are also, in the central portion of the city, 25 keyless boxes—non-interfering boxes. They have a handle which you turn in order to sound the alarm, and there is a gong inside the outer door which rings as soon as the handle is turned. This is to alarm the policemen in the vicinity in order that false alarms may be prevented. The number of alarms in 1863 (the first year of the fire alarm telegraph) was 141; the number in 1894 was 1,036, and in 1895 a smaller number—831. In the olden times the streets were lighted by coal oil lamps. For a great while back we have had gaslight. A few years ago electric lights were introduced for the lighting of the streets, and the last electric light contract was made to extend for ten years from the 1st of January, 1894. The electric lights now in use number 1,042 arc lights. There are 108 sixty-five candle power incandescent lights, three such lights being equal to an arc light. The contract provides that the city shall pay \$124.10 per arc light per annum (equal to 34c per night) for the first term of five years; \$120.45 (equal to 33c per night) for the second term of three years, and 116.80 per arc light for the third term of three years (equal to 32c per night). Then, in addition to these arc lights there are 701 gas lamps in the streets, supposed to be sixteen candle power. The fire department of this city is run at less cost than any of the American cities of the same or approximate populations, as will be seen by the following statement:—

	Population.	Expense per ann.	Force of Men.	Hose in feet.
Montreal..	250,000	\$148,506	190	28,000
Buffalo..	300,000	450,000	354	66,200
Detroit..	250,000	583,952	338	55,000
Milwaukee..	276,000	419,000	315	57,400
Minneapolis	210,000	330,143	306	48,333
Providence..	150,000	257,395	265	.....

Montreal cannot afford to reduce its fire brigade, neither in numbers nor efficiency. If the city cannot furnish the funds for the proper maintenance of the brigade, I hope the citizens will come to its help by increased taxes to sustain it. The Fire Committee will never consent to the fire department being reduced.

Street
Lighting.

Cost of the Fire
Department.

LECTURE IX.—FEBRUARY 14TH, 1896.

THE PUBLIC HEALTH AND THE AUTHORITIES
ENTRUSTED WITH ITS CARE.

BY F. W. CAMPBELL, M.D., L.R.C.P., Dean of Bishop's College.

(Note. For Dr. Campbell's remarks on our Sewerage and Water
Systems see Lectures V. and VII.)

In Early Days. From 1785 for many years the magistrates issued strict injunctions for keeping the streets in order. Every householder had to keep free from filth, mud, dirt, rubbish, straw or hay, one half of the street opposite his own house. The cleanings were to be deposited on the beach, for it must be remembered that it was not until after 1833 that wharves existed to any extent. Stray pigs could be kept by the finder if no one turned up to claim them in 24 hours, and on making himself known the owner had to pay a fine of ten shillings. The carters were obliged to keep the markets clean. The regulations for slaughter-houses were also very strict. Keepers of inns and taverns had to light the street. Everyone entering the town in a sleigh had to carry a shovel with him to level the calots. While these rules did not by any means cover all that have been necessary, yet as they were strictly enforced they accomplished more than would a similar number passed at the present day, and only passed frequently to be disregarded. Up to 1876 but little had been systematically attempted in the way of supervising the health matters of Montreal. In that year Dr. Hingston was elected Mayor. The records up to that time show that sometimes only two or three meetings of the Health Board had previously been held during a year. Among the first duties to which Dr. Hingston devoted his energy, was the reorganization of the Health Committee, which at once took charge of all sanitary matters, and met regularly. A competent Medical Health Officer was appointed, as also a Sanitary Inspector and four Sanitary Policemen. By this Committee, or rather by the Medical Officer, was commenced the first systematic

Organization
of First Real
Health
Department.

attempt to compile the vital statistics of our city. The first im- Birth Rate.
 portant discovery in this connection was the demonstration of the
 enormous birth rate of the French Canadian population. I have
 examined the published returns from 1876 to 1894, and, while the
 percentage varies slightly every year, yet the figures for 1892 are
 a fair average of each year. In 1892 the number of births among
 French Canadians was 6,882, which was 52.56 per 1,000 of the popu-
 lation. This gave a surplus of births of 3,029 over the deaths of
 the same nationality, which amounted to 3,853. Among other
 Catholics the birth rate was 27.63 per 1,000, and among Protestants
 the rate was the lowest of all, viz.—27.34. I also note the fact that
 our birth rate is greater by one-third than in any city of Europe
 or the United States. In 1893 the birth rate was, in the following
 cities, as follows:—Edinburgh, 26; Glasgow, 32; Dublin, 28; London,
 30; Liverpool, 35; Manchester, 32; Birmingham, 31; Leeds, 32; Shef-
 field, 33; Bristol, 38; Sydney, 31; Paris, 24; Brussels, 25; St. Peters-
 burg, 31; Rome, 25; French Canadians of Montreal, 50. After
 hearing these figures I think we can readily understand the enor-
 mous increase of the French Canadian race. The mortality of a Death Rate.
 city must vary to a slight extent from year to year. Epidemics
 of a nature not controlled, so far as sanitation is concerned, will,
 in spite of all man can do, make their appearance. Such a condi-
 tion of things occurred in Montreal in 1894, when scarlet fever made
 its appearance and caused 497 deaths, or 309 more than in 1893,
 and 461 more than the total of the six preceding years. But even
 this disease, though unpreventable in its occurrence by any Board
 of Health, was quickly suppressed by the prompt action of our
 Health Board. The disease of all others which is under the con-
 trol of sanitary science is typhoid fever, and in 1894 the total num-
 ber of deaths from it was 42, the smallest number for any previous
 year. In connection with infectious and contagious diseases, it is How
 well at this point to say just a word with regard to the way in Contagious
 which they are now managed. By an arrangement with the city, Diseases are
 our large hospitals have been freed from admitting such cases. Managed.
 The city now takes charge of them in the civic hospital, their super-
 vision, however, being still under the Montreal General and Notre
 Dame hospitals. Such an arrangement is a most advantageous one,
 as it removes from the very centre of our city, to a point remote from
 it, two diseases, sometimes very prevalent, and which are rightly
 dreaded by the public, viz.—scarlet fever and diphtheria. Another Vaccination
 hygienic matter for which we owe our Board of Health a debt of and the
 obligation, is the high state to which they have brought vaccina- Smallpox.
 tion. It is but ten years since Montreal was the scene of a smallpox
 epidemic, the severity of which will be appreciated by those whose

Composition
and Powers of
the Board of
Health.

Powers of the
Health Officers.

memory may have become dulled by lapse of time, when I tell you that it caused 3,164 deaths, 96 only of whom were protestants. Almost a reign of terror existed in our city at that time, for it was deemed advisable by the health authorities to compel everyone attacked with the disease to enter the smallpox hospital, improvised on the Exhibition Grounds at Fletcher's Field. Since that period vaccination has been pretty thoroughly carried out, and from May, 1880, up to to-day, we have been absolutely free from smallpox. I do not think we are likely to ever see such an epidemic repeated, for we have not got the fuel. The by-law establishing the Board of Health of the City Hall, was passed in December, 1876. This body consists of the Mayor, ex-officio, and nine Aldermen. If necessary, nine, but not more, qualified citizens may be added. The Board has power to appoint such Health Officers as may be necessary; to adopt and enforce all sanitary matters relating to the cleanliness of the city; prevent the entry into the city of all strangers or emigrants, or their baggage, when the appearance of either indicates danger to the public health; to adopt prompt measures to prevent the spread of any epidemic, contagious or infectious disease; to prevent all communication between any part of the city so infected, except by means of physicians, nurses, or messengers to carry the necessary advice, medicine or food to the afflicted; to cause any avenue, street, or passage to be fenced or enclosed, and to adopt suitable measures to prevent persons from going to or coming from any part of the city so enclosed; to provide the means of cleaning, purifying and cleansing of all streets, buildings and premises in all ways that may be deemed requisite to preserve the health of the city. The powers of the Health Officers are given as: To enter at all hours any house or building, yard, vacant lot or other premises, and to order the removal of any offensive matter found therein; to enforce cleansing, purifying and draining as may be necessary to the public health; to isolate patients having smallpox, typhoid fever, diphtheria, or any other dangerous or contagious disease whenever they consider it for the welfare of the patients or the public. Under the written authority of the Medical Health Officer they may command the removal of persons lodging in any boarding house wherein the rooms are so overcrowded and filthy as to be unwholesome and dangerous to the public health; also the destruction of any bedding, wearing apparel, or other articles infected which may be found; provision is also made for the inspection of milk by two inspectors who shall visit all dairies or milk depots in the city. The by-law also directs that any physician who has under his care any case of smallpox, typhoid fever, diphtheria, or other dangerous or infectious disease, shall report the same to

the Health Department within twenty-four hours, giving name of patient, as well as number and name of street where such patient resides. A very important clause in this by-law is that which states that no parent or guardian shall permit any pupil to attend any school in the city, nor shall any one having control over such schools permit any pupil to attend any school in the city when such pupil is affected with or has been exposed to any contagious disease, until all danger of such contagious disease has passed, to the satisfaction to be Health Officer. The staff of the Health Department is as follows:—Medical Health Officer, Sanitary Engineer, Superintendent of the Scavenging Service, Secretary and assistant, three District Physicians and Vaccinators, four clerks, one notice server, one messenger, twenty-five sanitary policemen, one disinfecter, two city ment inspectors, three guardians of public baths. It would occupy too much time, and it is unnecessary, to define the duties of each. Among our by-laws we have several important ones which are in the interests of public health. For instance, it is most important that our ice supply shall be taken from where there can be no possible contamination. For this purpose it is directed that the City Surveyor shall lay out and indicate the places on the river where ice can be cut, and ice must not be cut on any other spot. Another by-law, which is more honored in the breach than in the observance, is that which provides that every cart, wagon, or other vehicle used to transport manure, house offal or other offensive substance in or through any of the streets of the city, shall be fitted with a good and substantial box thereon; and every such box shall be provided with a covering so as to conceal its contents, and prevent the escape of offensive exhalations. It is a matter of very great importance for the sanitary condition of the city, that its yards and lanes shall be kept continually free from any collection of garbage. About the year 1879 a systematic removal of house garbage was inaugurated. In 1880 its removal at night time was commenced. In 1883 I find that the sum of \$18,000 was voted for this purpose. From that date up to the time when the city again undertook the scavenging, some three years or so ago, the removal was done by contract, its disposal being accomplished by dumping. The contract invariably required that the offal be removed to a certain distance outside the city limits, where it was used to fill up low lying ground, gullies, ravines, etc. Some years ago it was decided to compel the contractor to incinerate the offal, and an apparatus for this purpose was built by him, but it was of no practical use, and the dumping was recommenced. Upon the completion of the five years' contract, which was on April 30th, 1893, a provisional arrangement was made with the contractor, whereby

Staff of the
Health
Department.

Some
Important
By-Laws.

Collection and
Removal of
Garbage.

The City
Undertakes
Its Own
Scavenging.

it was extended for a certain period in order to afford the city time to thoroughly study the question. A Committee of the Board of Health was formed for this purpose, and they advised the following alterations in the specifications:—(a) The city to be divided into three districts of equal size, East, Centre, and West, each to be provided with a piece of land sufficiently extensive to accommodate a building for an incinerator, as also stables, and a building for the horses and vehicles required to carry out the service in the section. (b) The daily removal of offal from 1st of April to the 31st of October each year. (c) The incineration of all refuse. (d) The work to be performed only at night. (e) The contract to be for seven years from April 1st, 1893. The Board of Health concurred in this recommendation of its Committee, and advertised for tenders. Only one offer was received—price \$113,000, with a yearly increase of 3 per cent. This convinced the city that there was no alternative but taking the service into their own hands. It granted an appropriation of \$100,000 for the purchase of three sites for incinerators within the city; the old Gregory property, just south of the canal and near the wheel-house of the water-works, purchased for a little over \$33,000, and embracing 188,579 square feet, whereon to-day is working the incinerator for the western division; the “Amos” property, a large property comprising 700,000 square feet, situated in the northern part of the city, for the centre division, costing \$25,000; and the “Bayard” property for the eastern station, which cost \$16,625, and has an area of 33,000 square feet. What the incinerator should be was a vexed question, but eventually that known as the “Thackery” patent was decided upon, and from all I can gather the decision was a good one, as it has fully done all it was claimed to do. The present position is therefore this: The western section of the city has its refuse incinerated. In the other two sections it is dumped, pending the creation of incinerators, for which, at present, there are no funds. To give an idea of the magnitude of this work, I would state that from April 1st, 1893, to January 1st, 1894, there were removed 90,399 loads. It is to be hoped that the erection of the centre and east incinerators will be proceeded with just as soon as the finances will allow. In the meantime it is satisfactory to know that the “dumping,” which takes place in these sections, is not likely to produce any bad results. Under the direction of the Medical Health Officer they are disinfected by a new method followed in France for the abatement of similar nuisances. This consists in sprinkling the surface of the deposit and the saturation of the superficial layers, first with a saturated solution of sulphate of iron, and after complete desiccation by a like copious sprinkling of the milk of lime. The results obtained by

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this method have been really wonderful. In my young days, the cemeteries of the city were the Protestant Cemetery (now Dufferin square) on Dorchester street, between St. Urbain and Chenneville streets; the Military Cemetery on Papineau road (still extant); and the Roman Catholic Cemetery which covered the spot now embraced by Dominion square. The entry to the latter was by Cemetery street, now Cathedral street. All the bodies buried in the Military Cemetery still remain there, but on the opening of Mount Royal Cemetery, in 1854, a great many bodies were removed thither out of the Protestant Cemetery. When the Catholic Cemetery at Cote des Neiges was opened, it was intended to sell off for building lots the City Cemetery; in fact several were sold, and buildings commenced directly facing St. George's Church. The excavators for foundations revealed numerous bodies; the outcry became universal; building stopped, and in deference to the wishes of the entire population, the city purchased the ground, the result being the magnificent Dominion Square. The advantages of burial away from the city are many; time, however, forbids me to enter upon their consideration. Aside, however, from sanitary considerations, there are others which appeal with great force to the better instincts of our nature. I have shown how much we have advanced in all which is calculated to promote our health, and with it our happiness. With our squares—excellent breathing places—scattered throughout our city, with our streets improved by being widened, with our glorious Mountain Park, with our elegant gem, St. Helen's Island Park, we have opportunities to roam and gain health for ourselves and children, for beyond that of many in this world. We have three public baths, where, in summer, every man and boy may cleanse himself, and we have, in the last three years, had added two excellent private swimming baths. The great object in sanitation, in my opinion, is to bring about good health and thus prolong life to the greatest number. Have we done this? Have other cities done this? I will not weary you with figures or numerous comparisons. Let me take London, where sanitary matters may be looked upon as at a very high point. In the year 1894 the net gain in life saved during the year was represented by 11,660 lives. In other words, had the death rate in 1892-93 prevailed throughout the year 1894, 11,660 lives would have been sacrificed in addition to those which were actually lost by death. In 1893 the death rate in the following cities was:—London, 17.8; Dublin, 24.8, Edinburgh, 17.5, Glasgow, 19.8; Sydney, (with suburbs) 14.2, Brisbane, with suburbs 12.05; Paris, 20.3; St. Petersburg, 31.4; Moscow, 34.2; Berlin, 18.2; Vienna, 22.8; Rome, 19.4; New York, 20.1; Brooklyn, 20; Boston, 23; Philadelphia, 20; Baltimore, 20.8; Cincinnati, 18.3; St.

Cemeteries
of the City.

Advantages
and Suggested
Improvements.

What
Improved
Sanitation
has done and
can do.

Louis, 16.1. Turning to our city, I find that for the last twenty years the death rate, per 1,000 of the population, has gradually decreased each year in proportion to the expenditure for sanitary purposes per capita of the population. In 1872 the death rate was 37.36 per 1,000. In 1892 the rate was reduced to 24.49, a diminution of 13 in every thousand. The civic appropriation made for the Health Department in 1872 gave a capita of 13 cents. In 1892 the appropriation was 41 cents per capita. With such a result before us there can be no reason to doubt that by a further civic expenditure we could reduce our mortality to a rate which would compare favorably with that of the very best sanitary governed cities.

LECTURE X.—FEBRUARY 7TH, 1896.

MUNICIPAL SUFFRAGE AND THE LAWS GOVERNING CIVIC ELECTIONS.

BY ALEX. G. CROSS, B. C. L.
Legal Advisor of the Volunteer Electoral League.

It was recently my privilege to listen to an address given by a prominent officer of the Department of Public Instruction. This gentleman took occasion to mention that the readiness with which our school children forget most of what has been crammed into them, indicated a most beneficent provision of nature. That body of law which is known as the Charter of the City of Montreal, with regard to what might vulgarly be called "staying power," is far from being like the laws of the Medes and Persians. Accordingly, if the desire for change shall continue to be as active and effective as it has been, in modifying, altering and adding to the City Charter, you may have occasion for gratitude if within the next two years the beneficent aptitude already mentioned shall have enabled you to forget most of what you are now about to hear. The object of your meeting appears to be primarily an educational one, and so it will doubtless be anticipated

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that what is to be said to you shall consist principally of an account of the provisions of law according to which the people of Montreal select their aldermen. It will accordingly occur to you that what I am about to say should be divided into two parts, the first consisting of a summary explanation of what constitutes the right of municipal suffrage in this City of Montreal and of the way in which that is exercised, and the second consisting of a variety of observations bearing upon the moral obligations connected with the subject, or in other and fewer words, the subject will be first treated from the point of view of the municipal law and in the second place it will be dealt with as what we may call "the municipal conscience."

Part I.—Definition of the Right of Municipal Suffrage and explanation of its operation :—

I may begin by saying that you, the inhabitants of the City of Montreal, are a body corporate known by the statutory title of "The City of Montreal," and in so far as concerns your municipal interests you are under representative government. To govern yourselves in municipal affairs you elect two representatives in each ward, and the twenty-six representatives or aldermen and a mayor compose the City Council. The Council is the agent of the Corporation, and with the exception of statutory duties, specially assigned to particular officers, all that the City of Montreal can do must be done by the Council. Those of you who are electors in a particular ward elect the aldermen for that ward, but the electors of all the wards elect the mayor. Each elector has only one vote for mayor, but an individual may be an elector in several wards and vote in each of such wards for an alderman. Elections are required to take place in February 1st, every second year, January 20th being nomination day. As regards the statutory qualifications required of you as electors, it may be said that the right to the franchise comes as near to practically manhood suffrage as it is possible for any system to come, where the suffrage right is limited by the requirement of residence or interest in a locality of limited area. To entitle you to vote, your names must be upon the electors' list, and, to have the right to have your names put upon this list, each of you must be a British subject of twenty-one years of age or over, and must come within one of the following classes, viz :—(1) Male persons whose names are on the last assessment roll as owners of real estate in the ward assessed at a valuation of not less than \$300, or having an assessed rental value of \$30 per year or over. (2) Husbands whose wives own land valued at \$300 or over, or do a business which subjects them to payment of the business tax. (3) Widows and spinsters having the property qualifica-

Qualifications
of Electors.

tion above mentioned. (4) A class consisting of every male person, not being a guest or lodger in a hotel, boarding-house or private dwelling, and being an inhabitant householder in the city, whose name is entered upon the last assessment roll in force, as the tenant of a dwelling house or part of a dwelling house in the ward for which such list is made, such dwelling house or part thereof, if the tenancy be of a part, being of the assessed value of \$300 or upwards or of the estimated yearly value of \$30 or upwards. (5) A class consisting of every male person though neither an owner nor householder, who, either individually or jointly as a co-partner with any other person, is entered on the last assessment roll in force, as the tenant or occupant of any warehouse, counting house, shop, office or place of business in the city, provided that such warehouse, shop, etc., if occupied by the person individually, be of an assessed value of \$300 or over, or an annual rental value of \$30 or over. In cases of joint tenancy, the share of each tenant must come up to the required valuation, and joint tenancy is declared not to cover the cases of members of associations or societies in respect to the society premises, nor to the case of the employe of another person in respect of property upon which the employer himself is qualified as an elector. You will have observed that an electors' list, corresponding to what in Great Britain is called "burgess roll," occupies a very important place, and so it will be well to explain at once how this list comes into existence, particularly as it has a sort of double parentage, differing in that respect from most other 'voters' lists and burgess rolls. The primary idea respecting the right to the city municipal suffrage, appears to be that persons who contribute something in the form of taxes to the City Treasury are entitled to be electors. Accordingly, for the first step towards the making of an electors' list, advantage is taken of work and information primarily designed for the purposes of taxation and revenue collection; that is to say, work done by the assessors. The assessors are agents of the city for the purpose of valuation and tax appointment. They are required once a year to value and assess all immovable property in the city, and to make return of the names of all persons liable to pay any tax or assessment, specifying the amount payable by every ratepayer. They state with regard to each property, its actual value, the owner's name and the names of the tenants or sub-tenants, establishing amongst the tenants, when there are several, the proportion of the annual value applicable to each tenancy. The assessors in this way make a roll for each ward and after its completion they hold a meeting at which they hear complaints against the entries in the roll, and upon hearing the complaints they may confirm or amend the entries. After this

How the
Electors' List
is Prepared.

Work of the
Assessors.

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revision the rolls are handed over to the City Treasurer who proceeds to collect the taxes. So far it will be observed the operations of the assessors consist in providing machinery for revenue collection. At this stage, however, another part of the City Charter comes into operation, and makes it the duty of the assessors to copy from the last assessment roll then in force an alphabetical list of the persons therein named who appear to be qualified to be electors; to sub-divide each ward into electoral districts; to make a list of electors alphabetically arranged for each of those electoral districts, and to hand over these lists to the City Clerk before December 1st. The lists give the names of the voters, their callings, their street addresses, and mentions whether they are owners or tenants.

We have now got the length of having an electors' list, or rather a draft of a list lying in the custody of the City Clerk, but, since the operation of preparing it has been purely mechanical, consisting simply in copying into a list the names of such individuals as the assessment roll would indicate as coming within the conditions as to valuation required of electors by the Charter, the City Charter provides statutory machinery, by way of a Board of Revisors judicially and specially appointed, for the revision, correction, alteration and final authentication of the electors' list. Names are liable to be struck from the list by the Revisors for a variety of reasons, for example, because they happen to be the names of deceased persons, of minors, or of married women, or because they are already mentioned in the list for the same ward, or because they are the names of persons who have not the qualifications required by the electors. To have a name, other than that of a deceased person struck out, the application for that purpose must be lodged in the City Clerk's office on or before January 4th, and notice must be sent to the person whose name is objected to by registered letter through the post. A hearing follows and the matter is decided by the Revisors. The Revisors, at the close of their operations, certify the list and it becomes operative. It need only be added that a person whose name is on the list may find his right to vote suspended in consequence of the City Treasurer having placed certain letters opposite his name which are interpreted by law as indicating that the person has not paid his water rate or personal tax. The arranging of the details, such as engaging polling apartments, appointing and instructing officers who are to hold polls and receive ballots, rests chiefly with the Revisors. A candidate for the office of mayor or alderman is nominated by ten or more electors, who sign a nomination paper indicating which of the two charges or seats for the particular ward it is intended that the candidate shall fill, and the paper also must be accompanied by

The Board of
Revisors.

How
Nominations
are Made.

**Municipal
Elections.**

the signed consent of the candidate, of a declaration that he is absent from the city. The signatures to the paper are attested by a witness, and it is deposited, together with a sum of \$200, with the City Clerk between 10 and 12 o'clock in the forenoon of January 20th. When only one nomination for a seat is made, the nominee is proclaimed elected. More than one nomination for a seat entails the taking of a vote of the electors, unless there be a withdrawal of candidates, reducing the nomination to a single one. Elections by vote take place on February 1st, and voting is by secret ballot, the procedure of the Quebec Election Act (that is for the election of members of the Legislative Assembly) in that connection being made applicable to elections of mayor and aldermen. There are penal provisions in considerable number designed to prevent improper voting being effected or legitimate voting being hampered, as also provisions for contestation of electors by petition to a Superior Court judge within thirty days of the elections. About these matters any remarks which might here be made would be of too technical a nature to interest you. Such is a summary of the Charter provisions which control and guide your operations in the selection of the persons whom you elect to administer the affairs over which the City Council has jurisdiction.

**The ever
Increasing
Complexity
of Urban
Conditions.**

Part II.—Duties of Municipal Citizenship :—

An introductory word or two may appropriately be said with regard to the importance and gravity of the duties of citizenship at the present day. For a variety of reasons people display an ever increasing preference for life in cities and towns. Mr. Shaw, in his work on "Municipal Government in Great Britain," states that, "As against the Scotland of other days, when there were three country dwellers to one citizen of a town, there are now three townspeople for every one who lives in the country." This author points to the same course of events in other countries, and even to the Western United States, and at another place asserts that "The municipal corporation, until recently rather as political and social organisms, are now becoming highly conscious of their organic entity, and highly active in extending old functions and assuming new ones, the cardinal fact remains that the majority of families must henceforth, in increasing areas of the earth, live under urban conditions. With the increasing complexity of social relations and the tendency of public services to increase in number, and to be absorbed by public or governmental bodies, the classes of subjects with which civic governments have to deal are ever becoming more numerous and important. Hence the surpassing importance of securing the very best talent for municipal administration and of avoiding the

disastrous results which may be expected to flow from maladministration. Under such conditions it is natural that one should be diffident about laying down the rules of conduct with positiveness, and one cannot help feeling the difficulty of giving an adequate answer to the question, by what general principles can a young man best guide himself so as to do his best for the city in which he lives. The idea seems to be tacitly accepted at the present time that reforms can only be effected as the outcome of a general hue and cry movement. We have become, as it were, infected with the Yankee brass-band idea. When it is desired to accomplish some object of a public kind, the accepted policy seems to be to give the matter notoriety, to keep it before the eyes of all people, to enlist the arts of the newspaper man, and the cartoonist, and so upon the crest of some wave of excitement or acclaim, to carry the desired scheme to a consummation. It appears to me that there underlies all such programmes a dishonoring assumption, that people in general are unfit to judge for themselves, and that we should look forward to attaining a more independent and reflecting state where such methods will have been discontinued, and when we shall better appreciate the relative importance of work and noise. I cannot be convinced of the propriety of citizens of Montreal proclaiming to the world that the best interests are almost if not altogether at the mercy of a gang of traitorous plunderers in descriptions of whom all the defamatory resources of the English language are exhausted. Laying aside, then, the notion of detraction as not being a creditable or politic instrument of reform, let us consider the nature of the relation which really exists between an alderman and his electors. When you choose an alderman, you in effect ask one of your fellow citizens to undertake duties the efficient performance of which involves a great deal of work, a great deal of study of rules of procedure, and often entails, as a consequence, a great deal of keen annoyance which a person of average sensitiveness must feel when his efforts are balked by unmerited defeat. You ask him to perform these duties without one cent of remuneration, and even go a little further and interdict all commercial relations between the city and himself. I believe with most of our citizens that (speaking commercially) one cannot get much for nothing in this world, and that what is professedly given for nothing is likely not to be worth much. So it appears to me that this question of the gratuitous nature of aldermanic service lies at the threshold and should take first place in the consideration of improved municipal government, and that you should prepare yourselves to come to a decision respecting it. If our citizens of leisure and wealth would do their duty to the city, they would prepare themselves for alder-

Danger of
Temporary
Reform
Movements.

Why Our
Aldermen
should be Paid
a Salary.

manic duties and then come forward and offer to undertake these duties, and as they would probably profit most by good municipal administration, and would be attending to their own business to a greater extent than would be the case with others who must work for the supply of daily necessities, I feel that the citizens might justly expect them to perform those duties without remuneration, but because this end cannot be attained, and because Montreal gentlemen of wealth and leisure disregard this obligation of citizenship, we are under the necessity of looking to others to do the duties of aldermen, and, such being the case, it seems that we should look at the matter as a business man would look at it, and decide that if we desire first class service we should pay for first class service, and then hold the representative to strict account, because if we pay nothing for a service we are not in good position to find fault with what we get. Next, permit me to direct attention to another qualification for aldermanic service to which enough importance is not attached, viz: a knowledge of the rules of procedure governing the despatch of business, and the ability to formulate ideas in practical shape. Such rules are obviously necessary. However, many members of our City Council, and, in particular, many of its English speaking members, do not think it worth while to familiarize themselves with these rules, and as a consequence they are repeatedly balked in their attempts to attain desirable ends. A French newspaper in the city a few days ago contained some sensible statements about what is regarded as an undue preponderance of lawyers in the City Council. It may be due in part to professional narrow-mindedness that members of the legal profession are markedly zealous for a ceremonious adherence to the letter of rules, and perhaps still more zealous in making objection when rules are not being observed, but still it cannot be a matter of surprise that a few members of a deliberative assembly achieve a predominant influence, when, owing to the ignorance or inexperience of the others, these few become instinctively to be looked upon as the only ones who can embody their ideal and demands in the form of motions, amendments or reports.

Necessity of
an Alderman
Knowing Rules
for Procedure.

The Cultivation
of Civic Pride.

I have already mentioned the practice of sweeping disparagement of those whose methods are disapproved of and hinted that with regard to things which we do not like, if there be a time to speak there is pre-eminently also a time to be silent. We have all been witnesses of a state of affairs which seems to consist in unstinted denunciation of a number of men and their supporters, all of which seems to be met with a marked degree of indifference on the part of those assailed, while the injurious and regrettable phase of the matter is that the city suffers from such

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objurgation when so widely circulated by newspaper publication. Is it too soon or too late to suggest that you select another point of view? As young and inspiring Canadians we are not without reason for feeling some pride in being citizens in what is certainly no mean city. Our youth should be taught that if they were to ask where upon this North American continent cities can be found which can compare for a moment with this splendid city of the Royal Mountain, they would be asking a question which it would be very hard indeed to answer affirmatively. So, let us not too readily indulge in that self-depreciation which outsiders may be but too willing to consider a correct estimate. It is to be feared that in the propagation of some of our ideals, we do not make sufficient allowance for the divergent views of those whose ethical standards are different from our own. Let me in closing cite two short passages from Mr. Mill's considerations on representative government which I think both appropriate and well founded in principle:—

Citation from
Mill, Suffrage
a Trust rather
than a Right.

"The exercise of any political function, either as an elector or a representative, is power over others. Those who say that the suffrage is not a trust, but a right, can scarcely have considered the consequences to which their doctrine leads. If it is a right, if it belongs to the voter for his own sake, on what ground can we blame him for selling it, or using it to recommend himself to anyone whom it is his interest to please. A person is not expected to consult exclusively the public benefit in the use he makes of his house or his three percent stock, or anything to which he has a right. The suffrage is indeed due to him, among other reasons as a means to his own protection but only against treatment from which he is equally bound, so far as depends on his vote, to protect everyone of his fellow citizens. His vote is not a thing in which he has an option; it has no more to do with his personal wishes than the verdict of a juryman. It is strictly a matter of duty; he is bound to give it accordingly (sic) to his best and most conscientious opinion of the public good. Whoever has any other idea of it is unfit to have the suffrage; its effect upon him is to pervert not to elevate his mind. In any political election, even by universal suffrage (and still more obviously in the case of a restricted suffrage) the voter is under an absolute moral obligation to consider the interest of the public, not his private advantage, and give his vote to the best of his judgment exactly as he would be bound to do if he were the sole voter, and the election depended upon him alone. This being admitted, it is at least, a prima facie consequence that the duty of voting, like any other public duty, should be performed under the eye and criticism of the public; everyone of whom has not only an inter-

Conclusion.

"est in its performance, but a good title to consider himself wronged "if it is performed otherwise than honestly and carefully." I venture to add that the practice of asking large numbers to sign so called requisitions, and to give advanced pledges is mischievous, and that electors asked to consent themselves in such ways should refuse. Such, gentlemen, are the considerations which I have felt justified in expecting might possess some interest for you in connection with the wide subject of municipal suffrage. We hear it said that it is ideas which rule the world, and so, if here and there in what I have said are to be found some few ideas which may contribute to the formation of proper conceptions of the privileges of citizenship, and the responsibilities connected with the exercise of municipal suffrage, or indicate in any degree the directions in which useful effort may operate, the result will be better than the effort deserves. About this, however, there can be no doubt, viz: that the good wishes and encouragement of all should go out to those young men who from motives of patriotism and enlightened interest in the affairs of this great city are willing to expend energy

- "For the cause that lacks assistance,
- "For the wrongs that need resistance,
- "For the future in the distance,
- "For the good that you can do."

RULES AND REGULATIONS
GOVERNING THE
MOCK CITY COUNCIL
OF THE
YOUNG MEN'S CHRISTIAN ASSOCIATION,
MONTREAL.

This organization shall be known as the Mock City Council of the Y. M. C. A., of Montreal. Any member of the Y. M. C. A., of Montreal, active or associate, may become a member of this Council upon the annual payment of a fee of one dollar, which goes to the Educational Department to defray the cost of providing a professional elocutionary critic. The meetings of his body shall be held every Friday evening from the 1st of November to the 1st of March. This City Council shall consist of a Mayor, City Clerk, City Attorney, twenty-six aldermen, two representing each of the thirteen civic wards, and such number of aldermen at large as the Council may from time to time deem fit to admit. The meetings will be held in the Lecture Hall of the Y.M.C.A., on Dominion Square; due notification of each session, setting forth the business of the day, will be served upon each member forty-eight hours prior to the date of meeting. At the close of every session, each speaker will have the benefit of the kindly criticism of a professor of elocution, who will point out the lines along which the speaker may improve in his methods of public speaking.

The following shall constitute the rules of order for governing this body, which will be upon all occasions strictly enforced.

1. As soon after 8 p.m. as there shall be a quorum present, the Mayor, or in his absence, the acting Mayor, or in his absence, such Alderman as the members present shall choose, shall take the chair and call the members to order.

2. Immediately after the Mayor has taken his seat, the minutes of the preceding meeting shall be read by the Clerk, in order that any error therein may be rectified by the Council.

3. One-third the membership of the Council shall constitute a quorum for the transaction of ordinary business, but it shall require two-thirds of the members to pass a by-law.

Time of
Meeting and
Presiding
Officer.

Reading of
Minutes.

Quorum.

- Admission of Strangers during sittings.** 4. The public will be permitted to listen to the debate, but shall not occupy seats reserved for the Councillors, nor take any part in the discussion.
- Preservation of Order in the Council.** 5. The Mayor shall preserve order and decide questions of order, subject to appeal to the Council; in explaining a point of order or practice, he shall state the rule or authority applicable to the case.
- Mayor not to Debate.** 6. The Mayor shall take no part in any debate, or vote, unless the Council shall be clearly divided, in which case he may give his reason for so voting. He may, however, state facts, and give his opinion on questions of order.

DEBATE.

- Members Speaking.** 7. When a member is about to speak, he shall rise in his place and respectfully address the Mayor. He shall confine himself to the question, and avoid all personalities or offensive words against any member of the Council.
- When a Point of Order is raised in Debate.** 8. A member called to order by the Chair, shall at once take his seat, but may afterwards offer an explanation. Should the Mayor or the Council, if appealed to, decide that the member was not out of order, he may continue.
- Members speak but once.** 9. No member shall speak more than once to a question, except in explanation of a material part of his subject, which may have been misunderstood, at which time he is not to introduce new matter.
- Time allowance.** 10. No member shall speak longer than five minutes.

CONDUCT OF MEMBERS.

- Decorum in the Council** 11. No member shall leave his seat while the Mayor is putting a question, nor shall a member interrupt another while speaking, except to a point of order. No member shall pass between the speaker and the Chair.
- Members must Vote.** 12. Every member present, when a question is put, shall vote, unless personally interested.
- Routine of Business.** 13. The ordinary routine of business in the Council shall be as follows:—
- a. Receiving petitions.
 - b. Presentation of reports of committees.
 - c. Notices of motion.
 - d. Questions put by members.
 - e. Orders of the day.
- Questions by Members.** 14. Questions may be put by any member of the Council to the Mayor, or the Chairman of any Committee, relating to any public matter connected with the business of the Council. No argument

or opinion is to be offered, nor fact stated, except such as be necessary by way of explanation. In answering such question the matter should not be debated.

ORDERS OF THE DAY.

15. a. The orders of the day shall be called in their numerical order.

b. No order shall be taken out of its turn, except on a vote of two-thirds of the Council.

c. Any order called three times without response, shall be struck from the list by the City Clerk.

MOTIONS AND QUESTIONS.

16. The Mayor shall consider a motion to adjourn as always in order, unless a member has possession of the floor, or any question has been put but not yet decided. Upon a question to adjourn there shall be no debate. Motion to Adjourn.

17. All motions shall be in writing, with name of mover and seconder, and shall be sent to the Chair after being read by the proposer. Motions—
How made.

18. The Mayor, upon receiving a written motion, shall read it aloud; it shall then be deemed to be in possession of the Mayor, and may be debated. It may, however, be withdrawn at any time before decision or amendment, with the permission of the Council. Motions—
How proposed.

19. After the motion has been read by the Mayor, the mover and seconder shall have the first right to speak.

20. When a question is under debate no motion can be received, except it be What is in
Order during
Debate.

1. To amend the question.

2. To commit.

3. To lay the question on the table.

4. To postpone the consideration of it.

5. To consider the previous question.

6. To adjourn.

21. The previous question, until it is decided, shall shut off all amendment and debate of the main question, and shall be put in this form—"Shall the main question now be put?" If the previous question be decided in the affirmative, the original question is to be put forthwith, but without any amendment or debate. Previous
Question.

22. A question may be reconsidered at any time during the same session, by the consent of a majority of the members present, or at any other subsequent session, by the concurrent vote of a majority of the whole membership of the Council. A motion to reconsider once made and decided cannot be again made during the current year. Reconsidera-
tion.

- Motion to Postpone, etc., not debatable. 23. A motion for postponement or to commit shall, until it is decided, shut out all debate on the main question.
- Amendment to an amendment. 24. A motion to amend an amendment shall be in order, but to amend an amendment to an amendment shall not be in order.
- An amendment when in order. 25. An amendment modifying the intention of a motion shall be in order, but an amendment relating to a wholly different subject shall not be in order.

DIVISIONS.

- Divisions. 26. The names of the members present shall be called, each responding yes or no, and the City Clerk shall total and announce the result.

PETITIONS.

- Petitions. 27. Every petition, remonstrance, etc., intended to be presented to the Council, shall have thereon endorsed the name of the applicant and the substance of such application, which shall be read by the City Clerk, unless a member desires the reading of the entire paper.
- Supplies. 28. No resolution, motion, or report, involving the expenditure of any portion of the city revenue, shall be debated by the Council, unless the same shall have been previously submitted to and approved of by the Finance Committee. Should, however, the Finance Committee refuse to sanction an appropriation, a three-quarters vote of the Council may pass it over their heads.

BY-LAWS.

- By-laws to be Printed. 29. When a by-law is to be submitted to Council for consideration, every member shall have a copy.
- Reading of By-laws. 30. Whenever a by-law is read in Council, the Clerk shall record the date of the reading thereof on the back.
- Idem. 31. Every by-law shall be read twice before it is committed and engrossed, and read the third time before it is signed by the Mayor.
- Idem. 32. No by-law brought into the Council shall have more than one reading on the same day.
- Preparing By-laws. 33. The duty of preparing by-laws shall devolve upon the City Clerk, with the assistance of the City Attorney.
- Privilege. 34. Whenever any question of privilege arises, it shall be taken into consideration immediately.

COMMITTEES.

- Committee of the whole. 35. Whenever it has been moved and carried that the Council go into Committee of the whole, the Mayor shall appoint a Chairman, whereupon he will vacate the chair. When the Council arises from Committee of the Whole, the Chairman reports to the Mayor the proceedings of said Committee.

36. The seven standing Committees shall be appointed by the Council from time to time, serving for one year session; each Committee shall consist of seven members, and they shall be named as follows:—

1. Finance.
2. Roads and Parks.
3. Police.
4. Water.
5. Fire and Light.
6. Health.
7. Elections.

No more than one member from any other Standing Committee shall be a member of the Finance Committee. The Chairman of the Standing Committees shall occupy the front circle of seats nearest the Mayor's chair.

37. Special Committees may be appointed on motion of a member by consent of the Council. A Committee appointed to report on any subject referred to it by the Council, shall give a statement of facts and also an expression of opinion thereon in writing, and no such report shall be received unless signed by a majority of said Committee.

38. A majority of any Committee shall form a quorum.

Quorum.

39. The Chairman of the Standing Committee shall always have the right to vote in Committee.

40. If a majority of a Committee fail to agree upon a report, the Chairman may make a special report to the Council.

DUTIES OF CLERK.

41. The City Clerk shall make a list of all by-laws, resolutions, and reports on the table, which shall be considered the general order of the day. New communications and petitions shall be first taken up, then any unfinished subject, then the special orders of the day, unless the Council decide differently.

To prepare
Orders of
the Day.

42. The Clerk shall keep minutes of the votes and proceedings of the Council, entering thereon all accepted orders and resolutions.

To keep
Minutes.

43. It shall be the duty of the Clerk of the City Council to attend the meetings of Council and Committees, and keep the records of Committees of Council, and all such records shall be subject to inspection by members of the Council.

44. No standing rule or order of the Council shall be suspended, unless with the consent of three-fourths of the members present, nor shall any rule or order be repealed or amended without due notice being given of the motion thereof, nor unless a majority of the whole Council shall concur therein.

MEMBER'S NOTIFICATION.

ASSOCIATION HALL.

Montreal, December 31st, 1895.

Sir,—You are requested to attend the regular meeting of the Y. M. C. A. Mock City Council, to be held in the Association Hall, on Friday, January 3rd., 1896, at 8 o'clock p.m., convened by His Worship the Mayor. To consider the business summarily specified in the following order of the day.

A. W. PAYNE,
City Clerk.

ROUTINE PROCEEDINGS.

Roll Call and Minutes.
Receiving Petitions.
Presenting Reports by Committees.
Notices of Motions.
Questions Put by Members.

ORDER OF THE DAY.

1. Report. Chairman of Finance. On amendments to the City Charter regarding the raising of a temporary loan, and increasing the civic revenue by additional taxation.
2. By-law. 2nd and 3rd reading of By-law with reference to the early closing of shops.
3. Report. Roads. On improving the means for gaining access to Mount Royal Park.
4. Report. Police. On the petition of certain ratepayers in favor of closing all saloons at 7 p.m., on Saturdays.
5. By-law. 1st and 2nd reading of By-law to amend By-law No. 50 in reference to the use of bicycles upon the public highways.
6. Report. Police. On the petition from the Montreal Kennel Club regarding the disposing of unlicensed dogs.
7. Motion. Ald. Barker. That the Legislature be petitioned to enact:—"That an allowance of \$1,200 be made to each member of this Council."
8. Motion. Ald. Ross. "That the business tax be reconstructed so as to discourage the spread of departmental stores."

